

Purchasing Office - Bureau des achats:

Informatics Professional Services - EL
Division/Services professionnels en informatique -
division EL
Terrasses de la Chaudière 4th Floor
10 Wellington Street
Gatineau
Québec
K1A 0S5

CONTRACT - CONTRAT

You are requested to sell to Her Majesty the Queen
in right of Canada, in accordance with the terms and conditions
set out herein, referred to herein or attached hereto, the goods,
services, and construction listed herein and on any attached
sheets at the price or prices set out therefor.

Nous vous demandons de vendre à Sa Majesté
la Reine du chef du Canada, aux conditions énoncées ou
incluses par référence dans les présentes, et aux annexes
ci-jointes, les biens, services et construction énumérés dans
les présentes, et sur toute feuille ci-annexée, au(x) prix indiqué(s).

The Vendor/Firm hereby accepts/acknowledges this contract.
Le fournisseur/entrepreneur accepte le présent contrat/en
accuse réception.

SignatureDate

Name, title of person authorized to sign (type or print)
Nom et titre du signataire autorisé (taper ou imprimer)

Comments - Commentaires

Vendor/Firm Name and Address
**Raison sociale et adresse du
fournisseur/de l'entrepreneur**
894658699PG0005
TEKSYSTEMS CANADA CORP./SOCIÉTÉ
TEKSYSTEMS CANADA
123 Slater Street, Suite 1000
123 Slater Street, Suite 1000
Ottawa
Ontario
K1P5H2
Canada
Operating as: TEKsystems

Title - Sujet TBIPS Engineering Professional Serv	
Contract No. - N° du contrat 47419-198132/001/EL	Date 2020-07-23
Client Reference No. - N° de référence du client 1000348132	
Requisition No. - N° de la demande 47419-198132	
File No. - N° de dossier 606el.47419-198132	CCC No./N° CCC - FMS No./N° VME
Financial Code(s) Code(s) financier(s) 0850	
GST/HST TPS/TVH	
F.O.B. - F.A.B. Destination	
GST/HST - TPS/TVH See Herein - Voir ci-inclus	Duty - Droits See Herein - Voir ci-inclus
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	
Invoices - Original and two copies to be sent to: Factures - Envoyer l'original et deux copies à: Specified Herein Précisé dans les présentes	
Address Enquiries to: - Adresser toutes questions à: Mansour, Silvana	Buyer Id - Id de l'acheteur 606el
Telephone No. - N° de téléphone (613) 858-9935 ()	FAX No. - N° de FAX () -
Total Estimated Cost - Coût total estimatif \$15,980,000.00	Currency Type - Devise CAD
For the Minister - Pour le Ministre Mansour, Silvana <div>Digitally signed by Mansour, Silvana Date: 2020.07.23 11:17:42 -04'00'</div>	

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CONTRACT AGAINST A SUPPLY ARRANGEMENT FOR TASK- BASED INFORMATICS PROFESSIONAL SERVICES (TBIPS) VARIOUS RESOURCE CATEGORIES - LEVEL 3 FOR CANADA BORDER SERVICES AGENCY

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List of Annexes to the Resulting Contract:

- Annex A Statement of Work
- Annex B Basis of Payment
- Annex C Security Requirements Check List

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1. Requirement

- (a) TEKsystems Canada Corporation (the "**Contractor**") agrees to supply to the Client the services described in the Contract, including the Statement of Work, in accordance with, and at the prices set out in, the Contract. This includes providing professional services as and when requested by Canada, to one or more locations to be designated by Canada, excluding any locations in areas subject to any of the Comprehensive Land Claims Agreements.
- (b) **Client:** Under the Contract, the "**Client**" is Canada Border Services Agency (CBSA).
- (c) **Reorganization of Client:** The Contractor's obligation to perform the Work will not be affected by (and no additional fees will be payable as a result of) the renaming, reorganization, reconfiguration, or restructuring of any Client. The reorganization, reconfiguration and restructuring of the Client includes the privatization of the Client, its merger with another entity, or its dissolution, where that dissolution is followed by the creation of another entity or entities with mandates similar to the original Client. In connection with any form of reorganization, Canada may designate another department or government body as the Contracting Authority or Technical Authority, as required to reflect the new roles and responsibilities associated with the reorganization.
- (d) **Defined Terms:** Words and expressions defined in the General Conditions or Supplemental General Conditions and used in the Contract have the meanings given to them in the General Conditions or Supplemental General Conditions. Any reference to an Identified User in the Supply Arrangement is a reference to the Client. Also, any reference to a "deliverable" or "deliverables" includes all documentation outlined in this Contract. A reference to a "local office" of the Contractor means an office having at least one full time employee that is not a shared resource working at that location.

2. Task Authorization

- (a) **As-and-when-requested Task Authorizations:** The Work or a portion of the Work to be performed under the Contract will be on an "as-and-when-requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract. The Contractor must not commence work until a validly issued TA has been issued by Canada and received by the Contractor. The Contractor acknowledges that any work performed before such issuance and receipt will be done at the Contractor's own risk.
- (b) **Assessment of Resources Proposed at TA Stage:** Processes for issuing, responding to and assessing Task Authorizations are further detailed in Appendices A, B, C and D of Annex A.
- (c) **Form and Content of draft Task Authorization:**
 - (i) The Technical Authority will provide the Contractor with a description of the task in a draft Task Authorization using the form specified in Appendix B to Annex A.
 - (ii) The draft Task Authorization will contain the details of the activities to be performed, and must also contain the following information:
 - (A) the contract number;
 - (B) the task number;
 - (C) the date by which the Contractor's response must be received (which will appear in the draft Task Authorization, but not the issued Task Authorization);
 - (D) the categories of resources and the number required;
 - (E) a description of the work for the task outlining the activities to be performed and identifying any deliverables (such as reports);

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- (F) the start and completion dates;
 - (G) any option(s) to extend initial end date (if applicable);
 - (H) milestone dates for deliverables and payments (if applicable);
 - (I) the number of person-days of effort required;
 - (J) whether the work requires on-site activities and the location;
 - (K) the language profile of the resources required;
 - (L) the level of security clearance required of resources;
 - (M) the price payable to the Contractor for performing the task, with an indication of whether it is a firm price or a maximum TA price (and, for maximum price task authorizations, the TA must indicate how the final amount payable will be determined; where the TA does not indicate how the final amount payable will be determined, the amount payable is the amount, up to the maximum, that the Contractor demonstrates was actually worked on the project, by submitting time sheets filled in at the time of the work by the individual resources to support the charges); and
 - (N) any other constraints that might affect the completion of the task.
- (d) **Contractor's Response to Draft Task Authorization:** The Contractor must provide to the Technical Authority, within two working days of receiving the draft Task Authorization (or within any longer time period specified in the draft TA), a quotation with the proposed total price for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract, as well as its corresponding proposed resource(s) in accordance with Appendix C to Annex A of the Contract. The Contractor's quotation must be based on the rates set out in the Contract. The Contractor will not be paid for preparing or providing its response or for providing other information required to prepare and validly issue the TA.
- (e) **Task Authorization Limit and Authorities for Validly Issuing Task Authorizations:**
To be validly issued, a TA must include the following signatures:
- (i) for any TA, inclusive of revisions, with a value less than or equal to \$300,000.00 (excluding Applicable Taxes), the TA must be signed by the Technical Authority and the Contractor; and
 - (ii) for any TA with a value greater than this amount, a TA must be signed by the Technical Authority, the Contracting Authority and the Contractor.
- Any TA that does not bear the appropriate signature(s) is not validly issued by Canada. Any work performed by the Contractor without receiving a validly issued TA is done at the Contractor's own risk. If the Contractor receives a TA that is not appropriately signed, the Contractor must notify the Contracting Authority. By providing written notice to the Contractor, the Contracting Authority may suspend the Client's ability to issue TA's at any time, or reduce the dollar value threshold described in sub-article (i) above; any suspension or reduction notice is effective upon receipt.
- (f) **Periodic Usage Reports:**
- (i) The Contractor must compile and maintain records on its provision of services to the federal government under Task Authorizations validly issued under the Contract. The Contractor must provide this data to Canada in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated.

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If services are not provided during a given period, the Contractor must still provide a "NIL" report. The data must be submitted on a quarterly basis to the Contracting Authority. From time to time, the Contracting Authority may also require an interim report during a reporting period.

(ii) The quarterly periods are defined as follows:

- (A) 1st quarter: April 1 to June 30;
- (B) 2nd quarter: July 1 to September 30;
- (C) 3rd quarter: October 1 to December 31; and
- (D) 4th quarter: January 1 to March 31.

The data must be submitted to the Contracting Authority no later than 15 calendar days after the end of the reporting period.

(iii) Each report must contain the following information for each validly issued TA (as amended):

- (A) the Task Authorization number and the Task Authorization Revision number(s), if applicable;
- (B) a title or a brief description of each authorized task;
- (C) the name, Resource category and level of each resource involved in performing the TA, as applicable;
- (D) the total estimated cost specified in the validly issued TA of each task, exclusive of Applicable Taxes;
- (E) the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
- (F) the start and completion date for each authorized task; and
- (G) the active status of each authorized task, as applicable (e.g., indicate whether work is in progress or if Canada has cancelled or suspended the TA, etc.).

(iv) Each report must also contain the following cumulative information for all the validly issued TA's (as amended):

- (A) the amount, exclusive of Applicable Taxes, specified in the Contract (as last amended, as applicable) as Canada's total liability to the Contractor for all validly issued TA's; and
- (B) the total amount, exclusive of Applicable Taxes, expended to date against all validly issued TA's.

(g) **Consolidation of TA's for Administrative Purposes:** The Contract may be amended from time to time to reflect all validly issued Task Authorizations to date, to document the Work performed under those TA's for administrative purposes.

3. Minimum Work Guarantee

(a) In this clause,

- (i) **"Maximum Contract Value"** means the amount specified in the **"Limitation of Expenditure"** clause set out in the Contract; and
- (ii) **"Minimum Contract Value"** means \$20,000.00 (excluding Applicable Taxes).

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- (b) Canada's obligation under the Contract is to request Work in the amount of the Minimum Contract Value or, at Canada's option, to pay the Contractor at the end of the Contract in accordance with sub-article (c), subject to sub-article (d). In consideration of such obligation, the Contractor agrees to stand in readiness throughout the Contract Period to perform the Work described in the Contract. Canada's maximum liability for work performed under the Contract must not exceed the Maximum Contract Value, unless an increase is authorized in writing by the Contracting Authority.
- (c) In the event that Canada does not request work in the amount of the Minimum Contract Value during the Contract Period, Canada must pay the Contractor the difference between the Minimum Contract Value and the total cost of the Work requested.
- (d) Canada will have no obligation to the Contractor under this article if Canada terminates the entire Contract
 - (i) for default;
 - (ii) for convenience as a result of any decision or recommendation of a tribunal or court that the contract be cancelled, re-tendered or awarded to another supplier; or
 - (iii) for convenience within ten business days of Contract award.

4. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

(a) General Conditions:

- (i) 2035 (2018-06-21), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

With respect to Section 30 - Termination for Convenience, of General Conditions 2035, Subsection 04 is deleted and replaced with the following Subsections 04, 05 and 06:

- 4. The total of the amounts, to which the Contractor is entitled to be paid under this section, together with any amounts paid, due or becoming due to the Contractor must not exceed the Contract Price.
- 5. Where the Contracting Authority terminates the entire Contract and the Articles of Agreement include a Minimum Work Guarantee, the total amount to be paid to the Contractor under the Contract will not exceed the greater of:
 - (a) the total amount the Contractor may be paid under this section, together with any amounts paid, becoming due other than payable under the Minimum Work Guarantee, or due to the Contractor as of the date of termination, or
 - (b) the amount payable under the Minimum Work Guarantee, less any amounts paid, due or otherwise becoming due to the Contractor as of the date of termination.
- 6. The Contractor will have no claim for damages, compensation, loss of profit, allowance arising out of any termination notice given by Canada under this section except to the extent that this section expressly provides. The Contractor agrees to repay immediately to Canada the portion of any advance payment that is unliquidated at the date of the termination.

(b) Supplemental General Conditions:

The following Supplemental General Conditions:

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- (i) 4002 (2010-08-16), Supplemental General Conditions - Software Development or Modification Services;
 - (ii) 4008 (2008-12-12), Supplemental General Conditions - Personal Information;
- apply to and form part of the Contract.

5. Security Requirement

The following security requirements (SRCL Common #19 and related clauses provided by the Contract Security Program) as set out under Annex "B" to the Supply Arrangement, applies to and forms part of the Contract.

1. The Contractor must, at all times during the performance of the Contract, hold a valid Facility Security Clearance at the level of Secret, issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC)
2. The Contractor personnel requiring access to protected/classified information, assets or sensitive work site(s) must EACH hold a valid personnel security screening at the level of **Reliability Status, Confidential** or **Secret** as required, granted or approved by CISD/PWGSC
3. The Contractor must not remove any protected/classified information from the identified work site(s), and the Contractor must ensure that its personnel are made aware of and comply with this restriction
4. Subcontracts which contain security requirements are not to be awarded without the prior written permission of CISD/PWGSC
5. The Contractor must comply with the provisions of the:
 1. Security Requirements Check List and security guide (if applicable), attached at Annex C
 2. Industrial Security Manual (Latest Edition)
- (a) Additionally, resources may be assessed for Reliability Status or Secret by the Technical Authority prior to commencing the Work, and from time to time throughout the Contract Period. The assessment may include a credit check. Upon request of the Technical Authority, in respect of any given resource, the Contractor must submit:
 - (i) the current level of security clearance granted or approved by CISD/PWGSC; and
 - (ii) a completed signed TBS 330-23 Form - Personnel Screening, Consent and Authorization Form (<http://www.tbs-sct.gc.ca/tbsf-fsct/330-23-eng.pdf>).
- (b) In the event a resource does not pass the Technical Authority's assessment, Canada may immediately, and without further notice, terminate the Contract for default in accordance with the General Conditions.

6. Contract Period

- (a) **Contract Period:** The "Contract Period" is the entire period of time during which the Contractor is obliged to perform the Work, which includes:
 - (i) The "Initial Contract Period", which begins on August 4, 2020 and ends three years later on August 3, 2023; and
 - (ii) The period during which the Contract is extended, if Canada chooses to exercise any options set out in the Contract.

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(b) **Option to Extend the Contract:**

- (i) The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to two additional one-year period(s) under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions set out in the Basis of Payment.
- (ii) Canada may exercise this option at any time by sending a written notice to the Contractor before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced, for administrative purposes only, through a contract amendment.

7. Authorities

(a) **Contracting Authority**

The Contracting Authority for the Contract is:

Name: Silvana Mansour
Title: Supply Team Leader
Public Works and Government Services Canada
Acquisitions Branch
Directorate: Professional Services Procurement Directorate
Address: 10 Wellington St., Gatineau, Québec
Telephone: (613) 858-9935
E-mail address: Silvana.b.mansour@tpsgc-pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

(b) **Technical Authority**

The Technical Authority for the Contract is:

Name: Antonio Utano
Title: Executive Director
Organization: Information, Science and Technology Branch (ISTB)
Address: 333 North River Road, Tower B
Telephone: 343-291-5129
E-mail address: Antonio.utano@cbsa-asfc.gc.ca

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

In his absence, the Technical Authority for the Contract is:

Name: Cameron MacDonald
Title: Director General
Organization: Information, Science and Technology Branch (ISTB)
Address: 333 North River Road, Tower B

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Telephone: 343-291-6018 / 613-899-7421
E-mail address: Cameron.macdonald@cbsa-asfc.gc.ca

(c) **Contractor's Representative**

Name:
Title: Account Manager
Address: 123 Slater Street, Suite 1000
Ottawa, ON K1P 5H2
Telephone: 613-726-3000
Facsimile: 613-726-8055
E-mail address: and ProposalTeam@TEKsystems.com

8. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental web sites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

9. Payment

(a) **Basis of Payment**

- (i) **Professional Services provided under a Task Authorization with a Maximum Price:** For professional services requested by Canada, in accordance with a validly issued Task Authorization, Canada will pay the Contractor, in arrears, up to the Maximum Price for the TA, for actual time worked and any resulting deliverables in accordance with the firm all-inclusive per diem rates set out in Annex B, Basis of Payment, Applicable Taxes extra. Partial days will be prorated based on actual hours worked based on a 7.5-hour workday.
- (ii) **Professional Services provided under a Task Authorization with a Firm Price:** For professional services requested by Canada, in accordance with a validly issued Task Authorization, Canada will pay the Contractor the firm price set out in the Task Authorization (based on the firm, all-inclusive per diem rates set out in Annex B), Applicable Taxes extra.
- (iii) **Travel and Living Expenses – National Joint Council Travel Directive:** The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal and private vehicle expenses provided in Appendices B, C and D of the National Joint Council Travel Directive and with the other provisions of the directive referring to “travellers”, rather than those referring to “employees”. All travel must have the prior authorization of the Technical Authority. Travel requests will only be considered for a work location which is located more than 100 kilometers from the National Capital Region. The Contractor will be paid for actual time spent travelling in accordance with the firm per diem rate set out in Annex B which per diem is based on a 7.5-hour workday. All payments are subject to government audit.
- (iv) **Competitive Award:** The Contractor acknowledges that the Contract has been awarded as a result of a competitive process. No additional charges will be allowed to compensate for errors, oversights, misconceptions or underestimates made by the Contractor when bidding for the Contract.

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- (v) **Contractor's Firm Per Diem Rates:** The Contractor agrees that the rates set out in Annex B remain firm throughout the Contract Period, except as may be provided for in the express terms of the contract. In reference to Article 18 (1) of SACC General Conditions 2035, the Contractor acknowledges that its obligation to provide services in accordance with the firm rates set out in Annex B is unaffected by the application of any existing law or any new law which may come into effect during the Contract Period.
- (vi) **Professional Services Rates:** In Canada's experience, bidders from time to time propose rates at the time of bidding for one or more Resource Categories that they later refuse to honour, on the basis that these rates do not allow them to recover their own costs and/or make a profit. This denies Canada of the benefit of the awarded contract. If the Contractor does not respond or refuses to provide an individual with the qualifications described in the Contract within the time described in the Contract (or proposes instead to provide someone from an alternate category at a different rate), whether or not Canada terminates the Contract as a whole or in part or chooses to exercise any of the rights provided to it under the general conditions, Canada may impose sanctions or take other measures in accordance with the PWGSC Vendor Performance Corrective Measure Policy (or equivalent) then in effect, which measures may include an assessment that results in conditions applied against the Contractor to be fulfilled before doing further business with Canada, or full debarment of the Contractor from bidding on future requirements.
- (b) **Limitation of Expenditure – Cumulative Total of all Task Authorizations**
 - (i) Canada's total liability to the Contractor under the Contract for all validly issued Task Authorizations (TAs), inclusive of any revisions, must not exceed the amount set out on page 1 of the Contract, less any Applicable taxes. With respect to the amount set out on page 1 of the Contract, Customs duties are excluded and Applicable Taxes are included
 - (ii) No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.
 - (iii) The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - (A) when it is 75 percent committed, or
 - (B) 4 months before the contract expiry date, or
 - (C) As soon as the Contractor considers that the sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions, whichever comes first.
 - (i) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Providing this information does not increase Canada's liability.
- (c) **Method of Payment for Task Authorizations with a Maximum Price:** For each Task Authorization validly issued under the Contract that contains a maximum price:
 - (i) Canada will pay the Contractor no more frequently than once a month in accordance with the Basis of Payment. The Contractor must submit time sheets for each resource showing the days and hours worked to support the charges claimed in the invoice.
 - (ii) Once Canada has paid the maximum TA price, Canada will not be required to make any further payment, but the Contractor must complete all the work described in the TA, all of which is required to be performed for the maximum TA price. If the work described in the TA is completed in less time than anticipated, and the actual time worked (as supported

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by the time sheets) at the rates set out in the Contract is less than the maximum TA price, Canada is only required to pay for the time spent performing the work related to that TA.

- (d) **Method of Payment for Task Authorizations with a Firm Price - Lump Sum Payment on Completion:** Canada will pay the Contractor upon completion and delivery of all the Work associated with the validly issued Task Authorization in accordance with the payment provisions of the Contract if:

- (i) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (ii) all such documents have been verified by Canada; and
- (iii) the Work delivered has been accepted by Canada.

- (e) **Electronic Payment of Invoices – Contract**

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- (i) Direct Deposit (Domestic and International);

- (f) **Time Verification**

Time charged and the accuracy of the Contractor's time recording system are subject to verification by Canada, before or after payment is made to the Contractor. If verification is done after payment, the Contractor must repay any overpayment, at Canada's request.

- (g) **Payment Credits**

- (i) **Failure to Provide Resource:**

- (A) If the Contractor does not provide a required professional services resource that has all the required qualifications within the time prescribed by the Contract, the Contractor must credit to Canada an amount equal to the per diem rate (based on a 7.5-hour workday) of the required resource for each day (or partial day) of delay in providing the resource, up to a maximum of 10 days.
- (B) **Corrective Measures:** If credits are payable under this Article for two consecutive months or for three months in any 12-month period, the Contractor must submit a written action plan describing measures it will implement or actions it will undertake to eliminate the recurrence of the problem. The Contractor will have five working days to deliver the action plan to the Client and the Contracting Authority and 20 working days to rectify the underlying problem.
- (C) **Termination for Failure to Meet Availability Level:** In addition to any other rights it has under the Contract, Canada may terminate the Contract for default in accordance with the General Conditions by giving the Contractor three months' written notice of its intent, if any of the following apply:
 - (1) the total amount of credits for a given monthly billing cycle reach a level of 10% of the total billing for that month; or
 - (2) the corrective measures required of the Contractor described above are not met.

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This termination will be effective when the three month notice period expires, unless Canada determines that the Contractor has implemented the corrective measures to Canada's satisfaction during those three months.

- (ii) **Credits Apply during Entire Contract Period:** The Parties agree that the credits apply throughout the Contract Period.
- (iii) **Credits represent Liquidated Damages:** The Parties agree that the credits are liquidated damages and represent their best pre-estimate of the loss to Canada in the event of the applicable failure. No credit is intended to be, nor will it be construed as, a penalty.
- (iv) **Canada's Right to Obtain Payment:** The Parties agree that these credits are a liquidated debt. To collect the credits, Canada has the right to hold back, draw back, deduct or set off from and against any money Canada owes to the Contractor from time to time.
- (v) **Canada's Rights & Remedies not Limited:** The Parties agree that nothing in this Article limits any other rights or remedies to which Canada is entitled under the Contract (including the right to terminate the Contract for default) or under the law generally.
- (vi) **Audit Rights:** The Contractor's calculation of credits under the Contract is subject to verification by government audit, at the Contracting Authority's discretion, before or after payment is made to the Contractor. The Contractor must cooperate fully with Canada during the conduct of any audit by providing Canada with access to any records and systems that Canada considers necessary to ensure that all credits have been accurately credited to Canada in the Contractor's invoices. If an audit demonstrates that past invoices contained errors in the calculation of the credits, the Contractor must pay to Canada the amount the audit reveals was required to be credited to Canada, plus interest, from the date Canada remitted the excess payment until the date of the refund (the interest rate is the Bank of Canada's discount annual rate of interest in effect on the date the credit was first owed to Canada, plus 1.25% per year). If, as a result of conducting an audit, Canada determines that the Contractor's records or systems for identifying, calculating or recording the credits are inadequate, the Contractor must implement any additional measures required by the Contracting Authority.
- (h) **No Responsibility to Pay for Work not performed due to Closure of Government Offices**
 - (i) Where the Contractor, its employees, subcontractors, or agents are providing services on government premises under the Contract and those premises are inaccessible because of the evacuation or closure of government offices, and as a result no work is performed, Canada is not responsible for paying the Contractor for work that otherwise would have been performed if there had been no evacuation or closure.
 - (ii) If, as a result of any strike or lock-out, the Contractor or its employees, subcontractors or agents cannot obtain access to government premises and, as a result, no work is performed, Canada is not responsible for paying the Contractor for work that otherwise would have been performed if the Contractor had been able to gain access to the premises

10. Invoicing Instructions

- (a) The Contractor must submit invoices in accordance with the information required in the General Conditions.
- (b) The Contractor's invoice must include a separate line item for each subparagraph in the Basis of Payment provision, and must show all applicable Task Authorization numbers.

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- (c) By submitting invoices, the Contractor is certifying that the goods and services have been delivered and that all charges are in accordance with the Basis of Payment provision of the Contract, including any charges for work performed by subcontractors.
- (d) The Contractor must provide the original of each invoice to the Technical Authority, and a copy to the Contracting Authority.

11. Certifications and Additional Information

- (a) Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, any TA quotation and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire Contract Period.

12. Federal Contractors Program for Employment Equity - Default by Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to Bid" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

13. Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

14. Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the following list, the wording of the document that first appears on the list has priority over the wording of any document that appears later on the list:

- (a) these Articles of Agreement, including any individual SACC clauses incorporated by reference in these Articles of Agreement;
- (b) Supplemental General Conditions, in the following order:
 - (i) 4002 (2010-08-16), Supplemental General Conditions - Software Development or Modification Services;
 - (ii) 4008 (2008-12-12), Supplemental General Conditions - Personal Information.
- (c) General Conditions 2035 (2018-06-21), Higher Complexity - Services;
- (d) Annex A, Statement of Work, including its Appendices as follows:
 - (i) Appendix A to Annex A - Tasking Assessment Procedure;
 - (ii) Appendix B to Annex A - Task Authorization (TA) Form;
 - (iii) Appendix C to Annex A - Resource Assessment Criteria and Response Table;
 - (iv) Appendix D to Annex A - Certifications at the TA stage;
- (e) Annex B, Basis of Payment;
- (f) Annex C, Security Requirements Check List;
- (g) the validly issued Task Authorizations and any required certifications; and

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(h) the Contractor's bid dated May 8, 2020.

15. Foreign Nationals (Canadian Contractor)

(a) SACC Manual clause A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)

16. Insurance Requirements

(a) Compliance with Insurance Requirements

- (i) The Contractor must comply with the insurance requirements specified in this Article. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.
- (ii) The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.
- (iii) The Contractor should forward to the Contracting Authority within ten (10) days after the date of award of the Contract a Certificate of Insurance evidencing the insurance coverage. Coverage must be placed with an Insurer licensed to carry out business in Canada and the Certificate of Insurance must confirm that the insurance policy complying with the requirements is in force. If the Certificate of Insurance has not been completed and submitted as requested, the Contracting Authority will so inform the Contractor and provide the Contractor with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within the time period will constitute a default under the General Conditions. The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

(b) Commercial General Liability Insurance

- (i) The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.
- (ii) The Commercial General Liability policy must include the following:
 - (A) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
 - (B) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
 - (C) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
 - (D) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.

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- (E) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
- (F) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
- (G) Employees and, if applicable, Volunteers must be included as Additional Insured.
- (H) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
- (I) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
- (J) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
- (K) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
- (L) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
- (M) Advertising Injury: While not limited to, the endorsement must include coverage for piracy or misappropriation of ideas, or infringement of copyright, trademark, title or slogan.

(c) **Errors and Omissions Liability Insurance**

- (i) The Contractor must obtain Errors and Omissions Liability (a.k.a. Professional Liability) insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature but for not less than \$1,000,000 per loss and in the annual aggregate, inclusive of defence costs.
- (ii) If the Professional Liability insurance is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
- (iii) The following endorsement must be included:

Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.

17. Limitation of Liability - Information Management/Information Technology

- (a) This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees. This section applies regardless of whether the claim is based in contract, tort, or another cause of action. The Contractor is not liable to Canada with respect to the performance of or failure to perform the Contract, except as described in this section and in any section of the Contract pre-establishing any liquidated damages. The Contractor is only liable for indirect, special or consequential damages to the

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extent described in this Article, even if it has been made aware of the potential for those damages.

(b) **First Party Liability:**

- (i) The Contractor is fully liable for all damages to Canada, including indirect, special or consequential damages, caused by the Contractor's performance or failure to perform the Contract that relate to:
 - (A) any infringement of intellectual property rights to the extent the Contractor breaches the section of the General Conditions entitled "Intellectual Property Infringement and Royalties";
 - (B) physical injury, including death.
- (ii) The Contractor is liable for all direct damages caused by the Contractor's performance or failure to perform the Contract affecting real or tangible personal property owned, possessed, or occupied by Canada.
- (iii) Each of the Parties is liable for all direct damages resulting from its breach of confidentiality under the Contract. Each of the Parties is also liable for all indirect, special or consequential damages in respect of its unauthorized disclosure of the other Party's trade secrets (or trade secrets of a third party provided by one Party to another under the Contract) relating to information technology.
- (iv) The Contractor is liable for all direct damages relating to any encumbrance or claim relating to any portion of the Work for which Canada has made any payment. This does not apply to encumbrances or claims relating to intellectual property rights, which are addressed under (i)(A) above.
- (v) The Contractor is also liable for any other direct damages to Canada caused by the Contractor's performance or failure to perform the Contract that relate to:
 - (A) any breach of the warranty obligations under the Contract, up to the total amount paid by Canada (including any applicable taxes) for the goods and services affected by the breach of warranty; and
 - (B) Any other direct damages, including all identifiable direct costs to Canada associated with re-procuring the Work from another party if the Contract is terminated either in whole or in part for default, up to an aggregate maximum for this subparagraph (B) of the greater of .75 times the total estimated cost (meaning the dollar amount shown on the first page of the Contract in the cell titled "Total Estimated Cost" or shown on each call-up, purchase order or other document used to order goods or services under this instrument), or \$1,000,000.00.

In any case, the total liability of the Contractor under subparagraph (v) will not exceed the total estimated cost (as defined above) for the Contract or \$1,000,000.00, whichever is more.
- (vi) If Canada's records or data are harmed as a result of the Contractor's negligence or willful act, the Contractor's only liability is, at the Contractor's own expense, to restore Canada's records and data using the most recent back-up kept by Canada. Canada is responsible for maintaining an adequate back-up of its records and data.

(c) **Third Party Claims:**

- (i) Regardless of whether a third party makes its claim against Canada or the Contractor, each Party agrees that it is liable for any damages that it causes to any third party in connection with the Contract as set out in a settlement agreement or as finally

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determined by a court of competent jurisdiction, where the court determines that the Parties are jointly and severally liable or that one Party is solely and directly liable to the third party. The amount of the liability will be the amount set out in the settlement agreement or determined by the court to have been the Party's portion of the damages to the third party. No settlement agreement is binding on a Party unless its authorized representative has approved the agreement in writing.

- (ii) If Canada is required, as a result of joint and several liability or joint and solidarily liable, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada by the amount finally determined by a court of competent jurisdiction to be the Contractor's portion of the damages to the third party. However, despite Sub-article (i), with respect to special, indirect, and consequential damages of third parties covered by this Section, the Contractor is only liable for reimbursing Canada for the Contractor's portion of those damages that Canada is required by a court to pay to a third party as a result of joint and several liability that relate to the infringement of a third party's intellectual property rights; physical injury of a third party, including death; damages affecting a third party's real or tangible personal property; liens or encumbrances on any portion of the Work; or breach of confidentiality.
- (iii) The Parties are only liable to one another for damages to third parties to the extent described in this Sub-article (c).

18. Professional Services - General

- (a) The Contractor must provide professional services on request as specified in this Contract. All resources provided by the Contractor must meet the qualifications described in the Contract (including those relating to previous experience, professional designation, education, language proficiency and security clearance) and must be competent to provide the required services by any delivery dates described in the Contract.
- (b) If the Contractor fails to deliver any deliverable (excluding delivery of a specific individual) or complete any task described in the Contract on time, in addition to any other rights or remedies available to Canada under the Contract or the law, Canada may notify the Contractor of the deficiency, in which case the Contractor must submit a written plan to the Technical Authority within ten working days detailing the actions that the Contractor will undertake to remedy the deficiency. The Contractor must prepare and implement the plan at its own expense.
- (c) In General Conditions 2035, the Article titled "Replacement of Specific Individuals" is deleted and the following applies instead:

Replacement of Specific Individuals

- (i) If the Contractor is unable to provide the services of any specific individual identified in the Contract to perform the services, the Contractor must within five working days of having this knowledge, the individual's departure or failure to commence Work (or, if Canada has requested the replacement, within ten working days of Canada's notice of the requirement for a replacement) provide to the Contracting Authority:
 - (A) the name, qualifications and experience of a proposed replacement immediately available for Work; and
 - (B) security information on the proposed replacement as specified by Canada, if applicable.

The replacement must have qualifications and experience that meet or exceed those obtained for the original resource.

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- (ii) Subject to an Excusable Delay, where Canada becomes aware that a specific individual identified under the Contract to provide services has not been provided or is not performing, the Contracting Authority may elect to:
- (A) exercise Canada's rights or remedies under the Contract or at law, including terminating the Contract in whole or in part for default under the Article titled "Default of the Contractor", or
 - (B) assess the information provided under (c) (i) above or, if it has not yet been provided, require the Contractor to propose a replacement to be rated by the Technical Authority. The replacement must have qualifications and experience that are similar or exceed those obtained for the original resource and be acceptable to Canada. Upon assessment of the replacement, Canada may accept the replacement, exercise the rights in (ii) (A) above, or require another replacement in accordance with this sub-article (c).
- Where an Excusable Delay applies, Canada may require (c) (ii) (B) above instead of terminating under the "Excusable Delay" Article. An Excusable Delay does not include resource unavailability due to allocation of the resource to another Contract or project (including those for the Crown) being performed by the Contractor or any of its affiliates.
- (iii) The Contractor must not, in any event, allow performance of the Work by unauthorized replacement persons. The Contracting Authority may order that an original or replacement resource stop performing the Work. In such a case, the Contractor must immediately comply with the order. The fact that the Contracting Authority does not order a resource to stop performing the Work does not relieve the Contractor from its responsibility to meet the requirements of the Contract.
- (iv) The obligations in this article apply despite any changes that Canada may have made to the Client's operating environment.

19. Safeguarding Electronic Media

- (a) Before using them on Canada's equipment or sending them to Canada, the Contractor must use a regularly updated product to scan electronically all electronic media used to perform the Work for computer viruses and other coding intended to cause malfunctions. The Contractor must notify Canada if any electronic media used for the Work are found to contain computer viruses or other coding intended to cause malfunctions.
- (b) If magnetically recorded information or documentation is damaged or lost while in the Contractor's care or at any time before it is delivered to Canada in accordance with the Contract, including accidental erasure, the Contractor must immediately replace it at its own expense.

20. Reporting Requirements

The Contractor must provide the following reports to the Contracting Authority at the following times:

- Quarterly Task Authorization Usage Report

In addition, the Contractor must provide the following reports to the Technical Authority:

- Defects, change requests and outstanding items tracking status reports;
- Monthly project progress reports;
- Guides, manuals, reports to be disseminated to various stakeholders as required;
- Synthesis report of facilitated meetings;
- Activity reports; and

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- Conversation notes, design documentation, change management documentation, site inspection reports and other reports requested under the Task Authorization.

21. Representations and Warranties

The Contractor made statements regarding its own and its proposed resources' experience and expertise in its bid that resulted in the award of the Contract and the issuance of TA's. The Contractor represents and warrants that all those statements are true and acknowledges that Canada relied on those statements in awarding the Contract and adding work to it through TA's. The Contractor also represents and warrants that it has, and all its resources and subcontractors that perform the Work have, and at all times during the Contract Period they will have and maintain, the skills, qualifications, expertise and experience necessary to perform and manage the Work in accordance with the Contract, and that the Contractor (and any resources or subcontractors it uses) has previously performed similar services for other customers.

22. Implementation

- Implementation of Professional Services:** If similar professional services are currently being provided by another supplier or by Canada's own personnel, the Contractor is responsible for ensuring that the transition to the professional services it provides under the Contract is completed in a way that does not disrupt Canada's operations or users, and does not result in any interim degradation to the timeliness or quality of service. The Contractor is solely responsible for any additional training required by its resources to perform the Work, and time spent by resources on that training or becoming familiar with the Client's environment must not be charged to Canada. The transition will be considered complete once the Contractor has demonstrated, to the satisfaction of the Technical Authority, that it is ready and able to carry out the Work. All costs associated with establishing itself to provide the professional services are the responsibility of the Contractor.

23. Identification Protocol Responsibilities

The Contractor will be responsible for ensuring that each of its agents, representatives or subcontractors (hereinafter referred to as Contractor Representatives) complies with the following self-identification requirements:

- Contractor Representatives who attend a Government of Canada meeting (whether internal or external to Canada's offices) must identify themselves as Contractor Representatives prior to the commencement of the meeting, to ensure that each meeting participant is aware of the fact that the individual is not an employee of the Government of Canada;
- During the performance of any Work at a Government of Canada site, each Contractor Representative must be clearly identified at all times as being a Contractor Representative; and
- If a Contractor Representative requires the use of the Government of Canada's e-mail system in the performance of the Work, then the individual must clearly identify him or herself as an agent or subcontractor of the Contractor in all electronic mail in the signature block as well as under "Properties." This identification protocol must also be used in all other correspondence, communication, and documentation.
- If Canada determines that the Contractor is in breach of any obligation stated in this Article, upon written notice from Canada the Contractor must submit a written action plan describing corrective measures it will implement to eliminate the recurrence of the problem. The Contractor will have five working days to deliver the action plan to the Client and the Contracting Authority, and twenty working days to rectify the underlying problem.
- In addition to any other rights it has under the Contract, Canada may terminate the Contract for default if the corrective measures required of the Contractor described above are not met.

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24. Use of individual protective equipment and Occupational Health and Safety (OHS) guidelines

- a. The Contractor must comply with Government of Canada onsite requirements in respect of individual Protective Pieces of Equipment (PPE) and adhere to Occupational Health and Safety (OHS) guidelines in force in the workplace.
- b. The Contractor will provide its resources the following individual PPE for working on site: prescribed face covering mask, gloves, and anything else that is required as a pre-requisite to entry and to work on Government of Canada premises. Canada reserves the right to modify the list of PPE and OHS guidelines, if required, to include any future recommendations proposed by the Public Health Agencies.
- c. The Contractor warrants that its resources will wear the PPE mentioned above when onsite and follow at all times the Occupational Health and Safety (OHS) guidelines in force in the workplace during the contract period. If resources are not wearing the prescribed PPE and/or are not following the Occupational Health and Safety (OHS) guidelines in force in the workplace, they will not be permitted access to government of Canada sites.

25. Dispute Resolution

- 25.1 The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- 25.2 The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- 25.3 If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- 25.4 Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".

ANNEX A

STATEMENT OF WORK

1.0 Title

Informatics Professional Services for Canada Border Services Agency
Protected B Cloud Engineering - National Capital Region (NCR)

2.0 Objective

The Information, Science and Technology Branch (ISTB) of the Canada Border Services Agency (CBSA) requires the services of senior Informatics Professional resources with knowledge and experience supporting and assisting with Protected B compliant Cloud Engineering, Architecture, Deployment, Security and System Administration, in accordance with the Government of Canada Security Control Profile for Cloud-based GC Services (<https://www.canada.ca/en/government/system/digital-government/modern-emerging-technologies/cloud-services/government-canada-security-control-profile-cloud-based-it-services.html#toc4>).

The purpose of these services is to augment and advise departmental resources in the execution of departmental IM/IT cloud initiatives managed by the Information, Science and Technology Branch (ISTB) team.

3.0 Background

CBSA is responsible for providing integrated services supporting national security and public safety priorities while facilitating the free flow of people and goods. Information technology is key to meeting the Agency's obligation to administer over 90 acts, regulations and international agreements, as well as deliver on the CBSA's commitments to modernization and renewal within its CBSA Renewal Agenda.

ISTB provides delivery of technology products, applications and services to meet business needs while investing in modern IT infrastructure to maintain, build on and innovate current and future IM/IT Agency initiatives.

One initiative led by the Information Services and Technology Branch (ISTB) under the Renewal umbrella includes reducing outages and disruptions, streamlining the number of applications and systems we use, replacing or upgrading aging equipment, and reducing maintenance and costs. Another significant aspect of CBSA Renewal includes building innovation capacity. In partnership with the Chief Transformation Officer Branch and business line branches, the ISTB will play a major role in executing rapid innovation in Border technology.

The Agency has over 180 national applications primarily hosted on SSC-managed IT infrastructure. An important quantity of those applications use dated technology, including mainframe and specialized COTS, and are affected by SSC's Workload Migration initiative to consolidate and modernize their Data Centers.

As part of an initiative entitled Application Modernization, to reduce dependencies on SSC-managed IT infrastructure in addition to renewing or refreshing its critical national applications, ISTB is currently working on a phased approach to leverage innovative technologies and initiate the migration of its applications to a modern hosting environment based in the cloud. Due to the quantities of personal and other sensitive data collected and used by CBSA to achieve its mandate, security and protection are an important concern.

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In the Summer of 2019, CBSA approved its Cloud Strategy under the Application Modernization initiative (see Figure 1). Phase 0 of this Strategy is currently underway and involves the establishment of a cloud 'landing zone', planning for subsequent phases and a pilot of a non-production migration activity. This is expected to be completed by March 2020. Phase 1 will build on the work of Phase 0, ensure the completion, integrity and security of the infrastructure, establish toolsets, processes and procedures and conduct the work to architect and migrate applications and data to the production Protected B compliant cloud.

A target of twenty-five percent of CBSA's existing national applications must be migrated to the cloud by the end of March 2022. Modernizing CBSA applications and moving them to the cloud will deliver numerous benefits to the Agency and for the security of the country, including:

- Reducing the risk and lower the cost/level of effort of migrating CBSA's systems to Enterprise Data Centres as part of SSC's Workload Migration project
- Modernizing legacy applications will allow the Agency to reduce its risk of exposure to unsupported technology for which finding expertise is extremely challenging (reduces technical debt)
- Attracting talent to the Agency and enabling our workforce to work smarter
- Optimizing our processes and tools

4.0 Scope of the Work

The Contractor must provide informatics professional services on an as and when required basis in the National Capital Region (NCR) as initiated through Task Authorizations. Projects may be in any of the following stages: inception, identification, in the midst of work, or delivery.

The Contractor is required to assist CBSA in deploying and maintaining a comprehensive application development and hosting environment in the Public Cloud meeting Protected B security requirements as per [Treasury Board Guidelines](https://www.canada.ca/en/government/system/digital-government/modern-emerging-technologies/cloud-services/government-canada-security-control-profile-cloud-based-it-services.html) available at <https://www.canada.ca/en/government/system/digital-government/modern-emerging-technologies/cloud-services/government-canada-security-control-profile-cloud-based-it-services.html>.

The Contractor will facilitate and perform the following cloud-based activities:

- install and configure virtual private clouds, virtual networks, firewalls, application gateways, load balancers, security groups and other network infrastructure as required;
- deploy and operate compute, storage, and other computing infrastructure;
- establish toolsets and processes supporting cloud development and operations;
- prepare and maintain platform and software-based services to allow the development, testing and migration of applications in the departmental cloud environment;
- analyze, classify, architect (or re-architect) and integrate the solutions and services required;
- ensure the security of the infrastructure, platform(s), services, applications and data;
- ensure the security and integrity of identity and authorization credentials;
- facilitate the selection, preparation and migration of legacy applications and data (as required) to the cloud environment; and
- support the transition of cloud applications into an operational state and provide guidance and mentoring to CBSA staff within their areas of expertise.

5.0 Resource-Specific Tasks

Tasks will include, but are not limited to the following:

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5.0.1 I.6. Network Analyst

- Prepare implementation plans for cloud technologies;
- Document cloud network configurations and settings;
- Prepare and analyze the detailed network system requirements including identification and sizing of resources, technical dependencies, support software/tools, interfaces, peak and normal performance metrics, redundancy, etc.;
- Contribute to the development of network architectures models; layer-2, layer-3 and layer-4;
- Install and configure **Next Generation* firewalls** in the provisioned cloud execution environments;
- Create networking/routing configuration and intrusion detection/prevention;
- Establish the protected B compliant networking foundation for a successful production workload migration to the cloud with connectivity to on-premises data centres;
- Utilize network monitoring tools; firewall, anti-malware and packet analyzers to support a secure Agency posture in the cloud, in accordance with Treasury Board's guidelines;
- Implement and support virtual environments;
- Troubleshoot network problem determination and resolution;
- Assist in interactive security debugging, testing and analysis of security attacks and system failures;
- Facilitate and guide the Agency in the planning, design and deployment of networking infrastructure, perimeter security and other services required to migrate, test and activate applications in the cloud;
- Employ Infrastructure as Code approaches to automate and deploy the provisioning and management of infrastructure resources;
- Monitor and stabilize particular facets of cloud platforms technology;
- Configure and optimize technical cloud platforms installations;
- Troubleshoot and respond to user problems;
- Perform impact analysis on cloud technology changes;
- Prepare and conduct testing strategies, scripts and prepare reports;
- Enforce and monitor security; and
- Develop scripts and templates to reflect current network configuration and topology to allow for the automated redeployment and repair of network infrastructure.

5.0.2 I.7 Platform Analyst

- Identify cloud adoption approaches;
- Develop and document detailed assessments and configurations for identity management platforms that function compatibly both with the cloud service provider platform and CBSA's on-premises technologies, including mainframe and active directory;
- Analyze functional requirements to identify procedures and decision flows when it comes to identity management and federation in the cloud;
- Prepare and analyze the detailed application system requirements including identification and sizing of resources, virtualization, technical dependencies, interfaces, loads, peak and normal performance metrics, software, storage, redundancy etc.;
- Implement the latest security and identity management standards supporting a secure cloud implementation;
- Conduct design and application development work as required;
- Deploy biometric security models and multi-factor authentication and secure enclave processing;
- Develop security and identity management systems and methods for:
 - generating passwords using key inputs and contextual inputs;

- authenticating a security device;
 - establishing trusted communication using a security device
- Define input/output sources, including detailed plan for technical design phase, and obtain approval for system proposals;
- Design cloud data structures and files, sub-systems and modules, programs, workloads, server-less apps, batch, on line, and production monitoring procedures;
- Develop testing strategies, scripts and testing reports;
- Document cloud system design, concepts and facilities, present and obtain approval of detailed system designs;
- Produce operational cloud identity management applications and documentation including all forms, manuals, programs, data files and procedures;
- Develop and prepare development environments including CI/CD pipelines;
- Perform solution integration activities supporting multi-cloud and hybrid solutions;
- Prepare and test implementation plans for cloud technologies, workloads and services;
- Install, monitor and stabilize particular facets of cloud platforms technology;
- Configure and optimize technical cloud platforms installations;
- Work with the System Administrator to develop and test automated rebuild procedures; and
- Identify typical ongoing operational support requirements following migration – day-to-day operations processes, integration and migration of additional workloads, data, maintenance, security procedures, compliance monitoring, inventory auditing, change management, account auditing and review, automated resource discovery, and system hardening etc.

5.0.3 I.9 System Administrator

- Prepare and analyze detailed computing infrastructure system requirements including identification and sizing of resources, virtualization, technical dependencies, interfaces, loads, peak and normal performance metrics, software, storage, redundancy, system logs, security etc.;
- Install, monitor and stabilize particular facets of cloud platforms technology;
- Configure and optimize technical cloud platforms installations;
- Perform general administration duties including permissions, upgrades, and patches on provisioned cloud systems;
- Work with the Platform Analyst to develop and test automated rebuild procedures;
- Test and implement backup and restore services and procedures;
- Test and implement failover services for high availability workloads;
- Perform system monitoring, analysis, and performance tuning in the cloud;
- Guide and support various teams with onboarding, troubleshooting and resolution of implementation issues;
- Collaborate as necessary, research and resolve security issues and system failures;
- Script and automate administrative tasks, resources and services in the cloud or hybrid service environments;
- Define and implement policies for cloud-based systems;
- Identify opportunities to reduce costs of cloud provisioned resources and services;
- Collaborate with Cloud Architects and others, providing feedback and implementing their conceptual, logical or physical designs or architectures;
- Mentor support and technical staff on the provisioning, administration and maintenance plans for both production and other cloud environments;
- Develop and execute quality assurance, performance, recoverability and failover tests on newly provisioned cloud environments and report the results;
- Design the structure of build books that are to contain a detailed and current configuration of

the environment, history of changes, operations schedule, rebuild and resource provisioning procedures;

- Maintain build books to ensure they reflect the current and complete configuration of the environment;
- Create and maintain play books containing scripts and templates to automate recovery, updates, rollbacks, etc.;
- Periodically perform spot-checks to validate that provisioned resources align with build books;
- Coordinate system service schedule with other lines of support and produce schedule for software, firmware updates, upgrades and or replacement of virtual hosting instances in the cloud;
- Enforce and monitor security;
- Maintain and administer service desk problem ticketing system;
- Monitor Cloud environment security posture;
- Monitor environment and application performance, generate metrics, and create dashboards;
- Prepare environment cost models and reports;
- Conduct compliance monitoring, inventory auditing, change management, account auditing and review, automated resource discovery, system hardening;
- Administer Operating System (OS) and application patching procedures; and
- Identify typical ongoing operational support requirements— day-to-day operations and troubleshooting processes, provisioning, maintenance, and security procedures, etc.

5.0.4 I.10 Technical Architect (Cloud Security)

- Capture and analyze Business Security Requirements;
- Define Technical and Functional requirements;
- Develop technical security architectures, frameworks and strategies to meet the business and application requirements;
- Identify security policies and requirements that drive out a particular solution;
- Analyze and evaluate alternative technology solutions to meet business problems and reduce risk with a particular focus on cloud technologies;
- Evaluate hardware and software relative to their ability to support specified requirements;
- Review computer software systems, security controls and data requirements;
- Conduct security architecture and design reviews and provide advice;
- Participate in security code reviews and penetration testing;
- Prepare Threat & Risk Assessments and other certifications and/or assessments as required; and
- Prepare and review other security documentation as required.

5.0.5 I.11 Technology Architect

- Conduct inventory of current CBSA environment, including workloads, services, data, network and infrastructure deployed;
- Conduct cloud assessments and analysis of workloads and services to determine which workloads are good candidates for migration;
- Map source environment resources/services to target cloud resource/service;
- Define and design appropriate to-be application, platforms, and hosting architectures in public clouds with connectivity to on-premises data centres;
- Conduct sizing activities;

- Design cloud architecture that meets key non-functional requirements (security, compliance, performance, resiliency, and availability);
- Oversee the migration of workloads and capabilities (e.g. Disaster recovery, archiving and backup) to cloud;
- Leverage cloud specific services (e.g. Web Application PaaS, Resource Manager, etc.) to implement desired cloud operating models and enable DevOps capabilities;
- Develop and document the proposed short and medium term cloud strategy for the selective migration to cloud services or alternative IT service delivery platforms;
- Ensure the integration of all aspects of cloud technology solutions;
- Provide support to applications and technical support teams in the proper application of existing infrastructure;
- Identify key issues that can be addressed and benefits that could be achieved with a selective migration to cloud services or alternative IT service delivery platforms;
- Design, document, and automate security and vulnerability incident response procedures;
- Design, document, and automate vulnerability assessment procedures; and
- Design, document, and automate OS and application patching and update procedures.

5.0.6 B.2 Business Architect

- Develop policies and rules that allow CBSA to carry out its mandate and functional responsibilities, and that govern its actual and planned capabilities in terms of computers, data, information, human resources, communication facilities, software and management responsibilities relative to Cloud computing;
- Develop the specifications for where, how and why the various organizational components fit together as they do, and how they support the CBSA's mandate;
- Lead day-to-day activities of transformation initiatives;
- Assess transformation initiative impacts on job roles and organization structures; and
- Make recommendations as to the best use of public funds

5.0.7 A.1 Application/Software Architect (Cloud Solutions)

- Create the conceptual, logical and physical designs for application architectures and their interoperability when hosted in a public cloud environment;
- Research, analyze, recommend and select technical approaches to address challenging development and integration problems with application architectures hosted within the public cloud environment;
- Develop implementation plans for the deployment of application architectures within the public cloud environment;
- Develop deployment strategies for architectures in the cloud that include secure remote access such as VPN gateways (client to gateway, gateway to gateway);
- Develop deployment strategies for cloud application architectures that include load balancing to ensure scalable performance;
- Develop deployment strategies for cloud architectures that include private networks for the storage and processing of more sensitive data;
- Develop deployment strategies for architectures of re-usable environments designed to test new data operations without affecting production usage;
- Provide guidance on how to limit the cost to the organization of cloud operations (scalability, filtering data before transmit etc.);
- Incorporate serverless design in application architectures;

- Design High Availability (accessible most of the time 99% 7/24 365 days per year) elastic cloud services and applications using infrastructure as code;
- Design database-as-a-service solutions;
- Design scaling sets of virtual machines to keep costs low while still providing acceptable response times during peak usage;
- Design cloud-based authentication solutions allowing for single sign-on (SSO) among applications; and
- Design cloud-based authentication solutions that implement multi-factor authentication.

5.0.8 A.7 Programmer/Analyst

- Create the conceptual, logical and physical designs for applications and their interoperability when hosted in a public cloud environment;
- Research, analyze, recommend and select technical approaches to address challenging development and integration problems with application architectures hosted within the public cloud environment;
- Provide guidance on how to limit the cost to the organization of cloud operations (scalability, filtering data before transmit etc.);
- Incorporate serverless design in application architectures;
- Design, develop and deploy highly available, elastic cloud services and applications using infrastructure as code;
- Design, develop and deploy database-as-a-service solutions;
- Review and analyze traffic flows and design and implement scaling parameters of infrastructure resources to keep costs low while still providing acceptable response times during peak usage;
- Design, develop and deploy cloud-based solutions that implement multi-factor authentication; and
- Develop testing scenarios, scripts and participate in testing, as required, to ensure quality, performance and security.

5.0.9 I.1 Data Conversion Specialist (Cloud Data Scientist)

- Research, analyze, recommend and select advanced technical and scientific data approaches to address challenging business issues;
- Collaborate on the development of implementation plans for the migration and deployment of appropriate solutions for accessing legacy data in the public cloud environment;
- Collaborate on the development of deployment strategies for architectures of re-usable environments designed to test new data operations without affecting production usage;
- Perform data cleansing, exploratory data analysis, trend analysis, develop predictive models and test their algorithms, conduct rapid prototyping and present creative ideas to exploit data to drive deeper insights and business value;
- Identify areas for improvement and optimization with the goal of increasing value, developing knowledge and insight into and derived from Big Data used by the organization;
- Translate departmental issues and business needs into reporting and/or application requirements in order to develop and design solutions;
- Analyze large structured and unstructured datasets involving a wide range of systems across multiple disparate data sets;
- Develop data analytic / visualization plans to support high-quality, fact-based business decisions;
- Develop models that can be used in analytic pipelines to make predictions for use in risk assessment;

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- Complete mapping, interfaces, mock conversion work, enhancements, actual conversion, and verify completeness and accuracy of converted data;
- Establish a strong working relationship with all clients, interact effectively with all levels of client personnel, and provide conversion support;
- Analyze and coordinate data file conversions; and
- Work to import files from heterogeneous platforms.

5.0.10 I.1 Data Conversion Specialist (Cloud Data Migration)

- Research, analyze, recommend and select technical approaches to address challenging application data issues for applications in the public cloud environment;
- Provide guidance on how to limit the cost to the organization of cloud operations (scalability, filtering data before transmit etc.);
- Collaborate on the development of implementation plans for appropriate solutions to the transformation and migration of or access to legacy data in the public cloud environment;
- Collaborate on the development of deployment strategies for cloud application architectures that include storage solutions and load balancing to ensure scalable performance;
- Develop innovative solutions to complex business and technology problems;
- Plan, develop and execute data migration strategies;
- Help design and implement cloud architectures and configurations;
- Collaborate with other architects to design and build solutions to migrate existing applications and their databases from an in-premise Data Center to a secure cloud environment;
- Analyze current Mainframe and UNIX/LINUX databases and their environments (DB2 and Sybase), evaluate and plan migrations to a cloud-based database platform and/or design hybrid distributed database solutions for reliability and cost containment;
- Work with large scale databases (250+ GB);
- Work with data migration tools and develop and enhance PL/SQL scripts to migrate from source database to target database;
- Identify workarounds for specific issues, discrepancies and other scenarios observed during migration;
- Automate solutions for repeatable operational activities and procedures;
- Develop test plan and test cases to demonstrate database readiness and synchronization post migration;
- Work closely with application teams to ensure business functionality and SLAs are met;
- Consult for optimal design of database environments, analyze complex distributed production deployments, and make recommendations to optimize performance and manage costs;
- Develop and conduct quality and integrity tests to validate all aspects of the data pre and post-migration; and
- Conduct technical sessions for internal teams.

5.0.11 C.11–Information Technology Security Vulnerability Analysis Specialist (Cloud)

- Use industry-standard IT Security risk assessment methodologies to evaluate proposed architecture;
- Work with architects, application developers, database professionals and others as necessary to design, test and deploy robust secure cloud applications;
- Participate in the evaluation, research and development of IT Cloud security risk assessments, security tools and implementation plans;
- Identify critical flaws in applications and systems that cyber attackers could exploit;
- Identify threats to, and technical vulnerabilities of networks and other infrastructure;

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- Conduct vulnerability assessments for networks, applications, databases and operating systems in the cloud environment; and
- Document findings and provide advice relevant to improving the security and integrity of the applications.

5.1 Common Tasks for All Resource Categories

Other common tasks may include, but are not limited to the following:

- Review the most recent GC, Treasury Board Secretariat (TBS) and SSC cloud services guidelines relating to network security, and other related documents available at that time;
- Maintain up to date knowledge of particular technologies and products supporting cloud technology by keeping relevant cloud qualifications up to date when new products are deployed;
- Monitor industry trends to ensure that the departmental cloud implementation fit with government and industry directions for cloud technology;
- Plan and coordinate IM/IT project management activities for cloud adoption including all aspects of planning/coordination/guidance and process;
- Provide IM/IT documentation such as Statement of Requirements (SOR), project plans, feasibility reports, schedules, project management plans, risk management plans and lessons learned;
- Formulate and manage the IM/IT project plans by defining deliverables, identifying and providing resources, identifying key milestones, reviewing project progress against milestones, and engaging ongoing risk management;
- Develop and maintain systems for the management and control of IM/IT requirements on projects in a manner compatible with client standards and guidelines. This includes communications and consultations with various stakeholders in the process;
- Support the Technical Authority to oversee IM/IT cloud initiatives and various IM/IT initiatives;
- Support the Technical Authority to oversee the cloud change management process for IM/IT requirements;
- Provide monthly project progress reports;
- Coach and mentor teams' members and users on best practices and provide knowledge transfer;
- Conduct stakeholder meetings; and
- Prepare input to presentations and executive briefings.

6.0 Deliverables

The Contractor must provide the following deliverables as specified in the Task Authorization, which can include, but are not limited to:

- Metrics;
- Processes and procedures for systems and applications;
- Conceptual architecture design;
- Technical design documents;
- Networking configuration;
- Architecture design specification;
- System requirements;
- Build books;
- Data flow diagrams;
- System controls;
- Test strategies;
- Test plans;
- Defects, change requests and outstanding items tracking status reports;

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- Standard operating procedures guides;
- Architectural diagrams;
- Frameworks;
- Impact analysis and strategies;
- Candidate design;
- Technical design document;
- Project plans;
- Analysis documents;
- Requirements studies;
- Options analysis;
- Conceptual system design;
- Technical design document;
- Strategy and roadmap for the departments migration to the recommended cloud services environments;
- Recommendations of short and medium term target environments for application systems and workloads;
- Protected B compliant network design and automated scripts;
- Operating System Hardening standards for Cloud;
- Deployment and configuration of infrastructure components facilitating production workload hosting in the Public Cloud accounts managed by the CBSA;
- Written and verbal advice;
- Knowledge transfer;
- Issues papers and Briefing Notes;
- Presentation decks and materials;
- Meeting facilitation and reports (e.g. monthly progress reports);
- Guides, manuals, reports to be disseminated to various stakeholders as required;
- Meeting agendas, schedules and minutes;
- Synthesis report of facilitated meetings;
- Activity reports;
- Conversation notes, design documentation, change management documentation, site inspection reports and other work requested under the Task Authorization; and
- Prototypes, scripts, templates and code.

Deliverables must be submitted in hard and soft copies in the appropriate formats (e.g. MS Project or MS Office Suite applications) as identified in the TA. All electronic deliverables must comply with departmental software standards, currently MS Office Suite latest version. Where required, CBSA will provide the Contractor with the required forms and templates to meet these standards.

All documents developed or updated by each of the Contractor's resources must be provided to the Project Authority for review, approval and signature (as required).

7.0 Constraints

The Contractor will be expected to maintain up to date knowledge of relevant technologies and products supporting cloud technology by keeping relevant cloud qualifications up to date when new products are deployed.

All aspects of the Cloud infrastructure, applications and services designed and implemented must meet the latest Government Protected B Medium Integrity, Medium Availability security profile requirements, and Treasury Board Secretariat (TBS) and SSC cloud services guidelines.

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The Government of Canada strives to ensure that the goods and services it procures are inclusive by design and accessible by default, in accordance with the Accessible Canada Act, its associated regulations and standards, and Treasury Board Contracting Policy. The following accessibility standards are applicable to this requirement.

- Accessibility for Ontarians with Disabilities Act (AODA) - Accessible Customer Service Standard
- Town of East Gwillimbury - Accessibility Standards for Customer Service

8.0 Client Support

The Client will provide all documentation and information necessary for the Work.

9.0 Language Requirements

While proposed resources must be fluent in English, there may be a requirement for specific resources to be fluent in both official languages, which will be specified in the TA.

10.0 Work Location

The Contractor's resources will be required to work onsite at CBSA premises or project site locations in the NCR, which will be identified in the Task Authorization (TA).

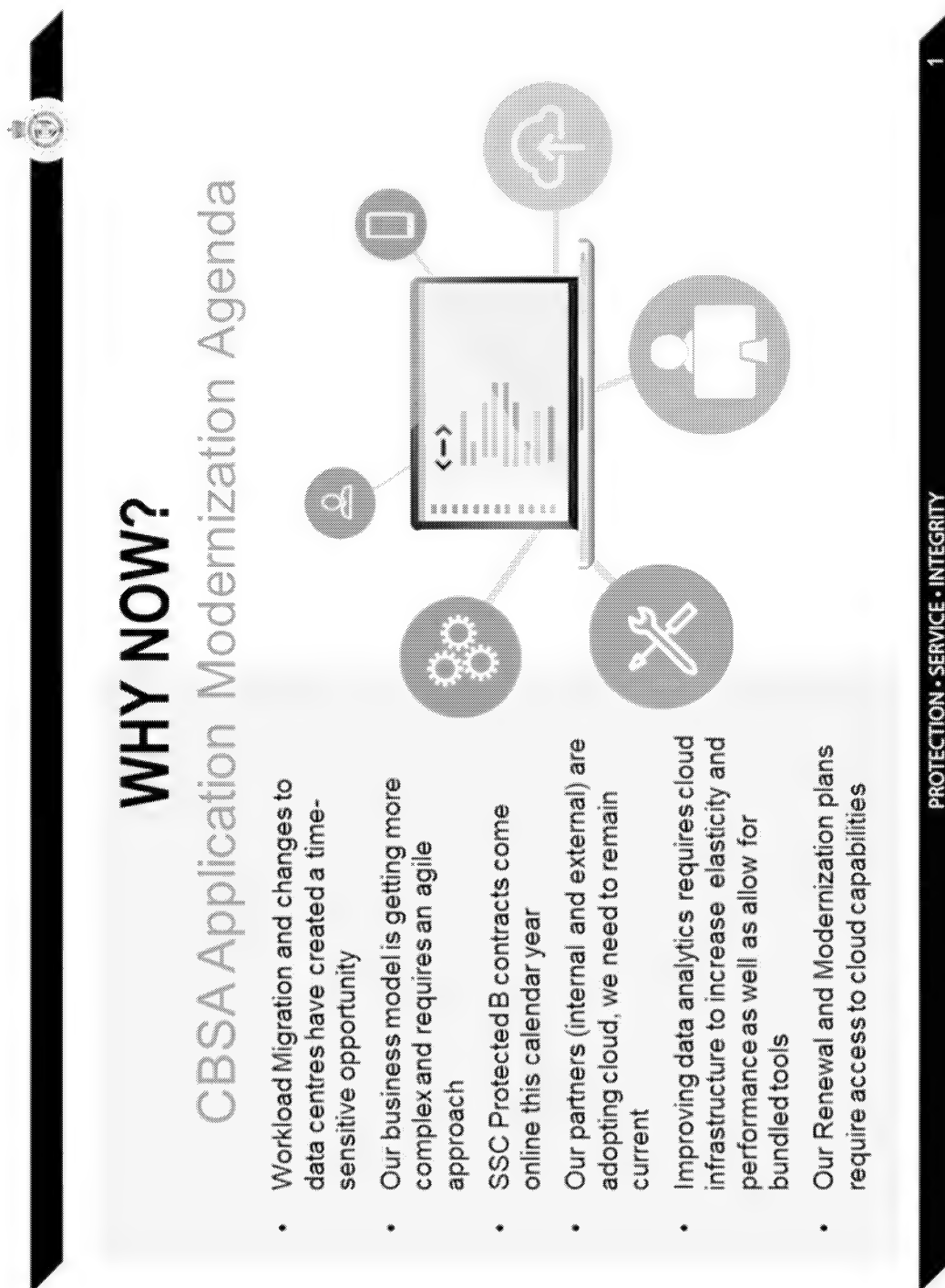
CBSA will provide, subject to security requirements, and only to the specified resource personnel, access to identified databases or applications residing on CBSA computers or networks for the sole purpose of executing tasks associated with this Contract. CBSA, at its sole discretion, will identify the nature and characteristics of such access.

11.0 Travel

The Contractor personnel may be required to travel outside the National Capital region to perform assigned work. All travel will require prior written approval of the Project Authority or the designated representative. The Contractor must ensure that travel is authorized in accordance with the current [National Joint Council Travel Directive](#). Travel within the NCR is the responsibility of the Contractor.

Travel outside of Canada may also be involved, and a valid passport will be required.

Figure 1: CBSA Application Modernization



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APPENDIX A TO ANNEX A

TASKING ASSESSMENT PROCEDURE

1. Where a requirement for a specific task is identified, a draft Task Authorization Form (TA Form) as attached at Appendix B to Annex A will be provided to the Contractor. Once a draft TA Form is received, the Contractor must submit to the Technical Authority a quotation of rates to supply the requested Resource Categories based on the information identified in the TA Form, as well as its corresponding proposed resource(s). The quotation must be signed and submitted to Canada within the time for response identified in the TA Form. The Contractor will be given a minimum of 2 working days (or any longer time period specified in the draft TA) turnaround time to submit a quotation.
2. With each quotation the Contractor must propose the required number of resources and for each proposed resource the Contractor must supply a résumé, the requested security clearance information and must complete the Response Tables at Appendix C of Annex A applicable to the Resource Categories identified in the draft TA. The same individual must not be proposed for more than one Resource Category. The résumés must demonstrate that each proposed individual meets the qualification requirements described (including any educational requirements, work experience requirements, and professional designation or membership requirements). With respect to the proposed resources:
 - (i) Proposed resources may be employees of the Contractor or employees of a subcontractor, or these individuals may be independent contractors to whom the Contractor would subcontract a portion of the Work. (Refer to Appendix D to Annex A, Certifications).
 - (ii) For educational requirements for a particular degree, designation or certificate, Canada will only consider educational programmes that were successfully completed by the resource before the date the draft TA was first issued to the Contractor.
 - (iii) For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of draft TA issuance and must continue, where applicable, to be a member in good standing of the profession or membership throughout the assessment period and Contract Period. Where the designation or membership must be demonstrated through a certification, diploma or degree, such document must be current, valid and issued by the entity specified in this Contract or if the entity is not specified, the issuer must have been an accredited or otherwise recognized body, institution or entity at the time the document was issued.
 - (iv) For work experience, Canada will not consider experience gained as part of an educational programme, except for experience gained through a formal co-operative programme at a post-secondary institution.
 - (v) For any requirements that specify a particular time period (e.g., 2 years) of work experience, Canada will disregard any information about experience if the résumé does not include the relevant dates (month and year) for the experience claimed (i.e., the start date and end date). Canada will evaluate only the duration that the resource actually worked on a project or projects (from his or her start date to end date), instead of the overall start and end date of a project or a combination of projects in which a resource has participated.
 - (vi) A résumé must not simply indicate the title of the individual's position, but must demonstrate that the resource has the required work experience by explaining the responsibilities and work performed by the individual while in that position. Only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the requirement, or reusing the same wording as the TA Form, will not be

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considered "demonstrated" for the purposes of the assessment. The Contractor should provide complete details as to where, when, month and year, and how, through which activities/responsibilities, the stated qualifications / experience were obtained. In situations in which a proposed resource worked at the same time on more than one project, the duration of any overlapping time period will be counted only once toward any requirements that relate to the individual's length of experience.

3. The qualifications and experience of the proposed resources will be assessed against the requirements set out in Appendix C to Annex A to determine each proposed resource's compliance with the mandatory and rated criteria. Canada may request proof of successful completion of formal training, as well as reference information. Canada may conduct reference checks to verify the accuracy of the information provided. If reference checks are done, they will be conducted in writing by e-mail (unless the contact at the reference is only available by telephone). Canada will not assess any points or consider a mandatory criterion met unless the response is received within 5 working days. On the third working day after sending out the e-mails, if Canada has not received a response, Canada will notify the Contractor by e-mail, to allow the Contractor to contact its reference directly to ensure that it responds to Canada within 5 working days. Wherever information provided by a reference differs from the information supplied by the Contractor, the information supplied by the reference will be the information assessed. Points will not be allocated or a mandatory criteria considered as met if the reference customer is not a customer of the Contractor itself (for example, the customer cannot be the customer of an affiliate of the Contractor). Nor will points be allocated or a mandatory criteria considered as met if the customer is itself an affiliate or other entity that does not deal at arm's length with the Contractor. Crown references will be accepted.
4. During the assessment of the resources proposed, should the references for two or more resources required under that TA either be unavailable or fail to substantiate the required qualifications of the proposed resources to perform the required services, the Contractor's quotation may be found to be non-responsive.
5. Only quotations that meet all of the mandatory criteria will be considered for assessment of the point rated criteria. Each resource proposed must attain the required minimum score for the point rated criteria for the applicable Resource Category. If the minimum score for any proposed resource is less than what is required, the Contractor's quotation will be found to be non-responsive.
6. Once the quotation has been accepted by the Technical Authority, the TA Form will be signed by Canada and provided to the Contractor for signature. The TA Form must be appropriately signed by Canada prior to commencement of any work. The Contractor must not commence work until a validly issued TA Form (the Task Authorization) has been received, and any work performed in its absence is done at the Contractor's own risk.

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APPENDIX B TO ANNEX A
TASK AUTHORIZATION FORM
(Provided under separate cover)

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APPENDIX C TO ANNEX A

RESOURCES ASSESSMENT CRITERIA AND RESPONSE TABLE

To facilitate resource assessment, the Contractor must prepare and submit a response to a draft Task Authorization using the tables provided in this Annex. When completing the resource grids, the specific information which demonstrates the requested criteria and reference to the page number of the résumé should be incorporated so that Canada can verify this information. The tables should not contain all the project information from the resume. Only the specific answer should be provided.

To demonstrate compliance with all criteria, the Contractor must include the following information:

- Project name;
- Client organization;
- Project start /end dates and duration;
- Project description;
- Description of role and tasks performed by the resource.

The Contractor must also include the following information for the most recent project referenced in response to any of the criteria:

- Contact information of client project representative

The Contractor must provide the following information for projects referenced (other than the most recent) in response to any of the criteria upon request from CBSA:

- Contact information of client project representative

1.0 Mandatory Resource Assessment Criteria:

NOTE TO CONTRACTOR: Where indicated by ***bold italics***, those terms are defined within the Glossary.

I.6 Network Analyst – Level 3

Resource Category: I.6 Network Analyst – Level 3			
Name of Proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
M1.1	The Contractor MUST demonstrate that the Proposed Resource has a minimum of ten (10) years' experience within		

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Resource Category: I.6 Network Analyst – Level 3			
Name of Proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
	<p>the last fifteen (15) years working on Enterprise-Class IT systems performing all of the following tasks:</p> <ul style="list-style-type: none"> • Documenting network configurations¹ and settings; • Contributing to the development of OSI network architecture models; • Installing and configuring Next-Generation firewalls; • Performing networking/routing configuration² and intrusion detection/prevention; • Utilizing network monitoring tools; firewall, anti-malware and packet analyzers; • Supporting converged infrastructure and virtual environments; • Automating network administration tasks via shell scripts; • Troubleshooting network problems, issue determination and resolution; and • Conducting and assisting in interactive security debugging, testing and analysis of security attacks and system failures. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M1.2	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last eight (8) years designing and architecting Infrastructure solutions leveraging cloud technologies and services including all of the following:</p> <ul style="list-style-type: none"> • Next Generation Firewalls • Virtual networks, subnets and User Defined Routing (UDR) • Multi-Protocol Label Switching • Security Groups • Application gateways and load balancing • Network failover • Containers • Elastic Computing • Storage and backup • Infrastructure as Code 		

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Resource Category: I.6 Network Analyst – Level 3			
Name of Proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
	Note: To qualify, a project must have a minimum duration of six (6) months		
M1.3	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of eighteen (18) months experience within the past five (5) years deploying and configuring virtual networks, routing and Next Generation Firewalls supporting a Cloud environment designed to meet any of the following security control profiles:</p> <ul style="list-style-type: none"> the <u>Government of Canada Protected B Medium integrity Medium availability (PBMM) Profile</u>. <u>FEDRAMP Moderate or High Level</u> <u>ISO 27001, ISO 27017 and ISO 27018</u> 		
M1.4	<p>The Contractor MUST demonstrate that the Proposed Resource has one or more of the following certifications applicable to Infrastructure as a Service (IaaS) platforms from one or more Leaders in the Gartner 2019 Magic Quadrant for IaaS Cloud (i.e. AWS, Azure, or Google)</p> <ul style="list-style-type: none"> AWS Certified Advanced Networking Specialty AWS Certified Solutions Architect Professional Microsoft Certified: Azure Administrator Associate AND Azure Enterprise-Class Networking Workshop elective OR MCSE: Cloud Platforms and Infrastructure Azure Solutions Architect Expert Professional Cloud Network Engineer (GCP) Professional Cloud Architect (GCP) <p>A copy of the certification(s) must be provided with the bid.</p>		

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I.7 Platform Analyst – Level 3

Resource Category: I.7 Platform Analyst – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
M2.1	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience as a Platform Analyst performing analysis, detailed design, implementation and support of platform technologies for a large user base*, of which:</p> <ul style="list-style-type: none"> - 2 years involved critical* platform technologies; - 3 years involved cloud platform technologies. <p>Note: Critical is defined as having High Availability (99%) service requirements. Large user base is defined as having 3000 or more active users.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M2.2	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of twelve (12) months' experience within the last five (5) years designing, implementing, developing or supporting platforms complying with at least four of the following security standards/requirements:</p> <ul style="list-style-type: none"> • OWASP Proactive Controls • FIPS 140-2 • FIPS 186-4 • SOC 2 controls • ISO 27001, ISO 27017 and ISO 27018 <p>Note: To qualify, a project must have a minimum duration of six (6) months. The experience can be demonstrated in various combinations of the listed standards/requirements across different projects, however the minimum twelve (12) months experience must be demonstrated for EACH security standard/requirement.</p> <p>Overlapping periods will count only once for each standard/requirement.</p>		
M2.3	The Contractor MUST demonstrate that the Proposed Resource has a minimum of twelve (12) months' experience		

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Resource Category: I.7 Platform Analyst – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
	<p>within the last five (5) years working with all of the following identity federation standards:</p> <ul style="list-style-type: none"> • OpenID Connect <u>and</u> OAuth 2.0 or later • SAML 2.0 or later <p>Note: To qualify, a project must have a minimum duration of six (6) months. The experience can be demonstrated in various combinations across different projects, however the minimum twelve (12) months experience must be demonstrated for EACH.</p> <p>Overlapping periods will count only once for each standard.</p>		
M2.4	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of twelve (12) months' experience within the last five (5) years implementing solutions involving Cloud-based identity access management, Multi-factor authentication AND one of the following;</p> <ul style="list-style-type: none"> • Biometric security models • Secure enclave processing <p>Note: To qualify, a project must have a minimum duration of six (6) months. The experience can be demonstrated in various combinations across different projects, however the minimum twelve (12) months experience must be demonstrated for EACH of the three requirements above.</p> <p>Overlapping periods will count only once for each standard/requirement.</p>		
M2.5	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of twelve (12) months' experience within the last five (5) years deploying a Level of Assurance 4 identity authentication solution for an organization with a user base of 3000 or more active users.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months.</p>		

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I.9 System Administrator – Level 3

Resource Category: I.9 System Administrator – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
M3.1	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last ten (10) years provisioning, administering and supporting all of the below infrastructure and services hosted on a public or private cloud service:</p> <ul style="list-style-type: none"> • Elastic Computing • Virtual Appliances • Storage • Backup solutions • User credentials • Secure Remote Access • Application gateways and load balancing <p>Note: To qualify, a project must have a minimum duration of six (6) months. The experience can be demonstrated in various combinations across different projects, however the minimum five (5) years' experience must be demonstrated for EACH one of the infrastructure and services listed above.</p> <p>Overlapping periods will count only once for each infrastructure and service.</p>		
M3.2	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of three (3) years' experience within the last ten (10) years performing all of the following tasks in a Cloud environment:</p> <ul style="list-style-type: none"> • Performing general system administration duties including managing permissions, and installing upgrades and patches on public cloud systems; • Installing and configuring software, resources and services; • Performing system monitoring, analysis, and performance tuning; • Configuring and managing secure connections between the client in-premise environments and the cloud; • Investigating and resolving security issues; 		

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Resource Category: I.9 System Administrator – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrated experience (Bidders to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Investigating and resolving application performance issues; and Scripting and automating tasks to manage resources and services in the cloud environments. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M3.3	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last ten (10) years performing all of the following tasks:</p> <ul style="list-style-type: none"> Collaborating with <u>Cloud Architects</u>, providing feedback and implementing conceptual, logical or physical designs or architectures; Developing and executing Quality Assurance tests on newly provisioned environments and recording and communicating the results; Performing system hardening on newly provisioned environments; Conducting compliance monitoring and inventory auditing; and Creating and maintaining structured and thorough Build Books that contain a detailed and current configuration¹ of the environment, with validated Rebuild and Provisioning Procedures. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		

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I.10 Technical Architect (Cloud Security) – Level 3

Resource Category: I.10 Technical Architect (Cloud Security) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
M4.1	<p>The Contractor MUST demonstrate that the Proposed Resource has three (3) years' experience leading the Security Assessment and Authorization efforts within a North American public sector organization for the successful authorization of government Protected B (or equivalent)** cloud deployments.</p> <p>* Successful has the following characteristics: The cloud deployment has been designed with specific controls and to meet specific security requirements, has undergone assessment according to a recognized Security Assessment & Authorization process and received an Authority to Operate from the appropriate responsibility area.</p> <p>** "Protected B" data is defined as sensitive personally-identifiable private data which could be injurious to an individual or organization if compromised.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M4.2	<p>The Contractor MUST demonstrate that the Proposed Resource has five (5) years' experience, of which 3 years or more were within a Cloud environment, performing ALL of the following tasks:</p> <ul style="list-style-type: none"> • Defining Technical and Functional security requirements; • Creating Security Architecture; • Participating in Infrastructure and Application Architecture Reviews; • Participating in Infrastructure and Application Design Reviews; and • Performing IT Certification or Assessment activities. <p>Note: To qualify, a project must have a minimum duration of three (3) months</p>		
M4.3	<p>The Contractor MUST demonstrate that the proposed resource has any three (3) of the following certifications:</p> <ul style="list-style-type: none"> • Certified Cloud Security Professional 		

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Resource Category: I.10 Technical Architect (Cloud Security) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> • Certified Information System Security Professional (CISSP) • Certified ISO 27001 Lead Implementer • Certified Information Systems Auditor (CISA) • Certified Information Security Manager (CISM) • Certified in Risk and Information System Control (CRISC) • Cloud Security Alliance Cloud Security Knowledge (CCSK) • GIAC Industrial Cyber Security Professional (GICSP) • Payment Card Industry – Qualified Security Assessor (PCI-QSA) • System Security Certified Practitioner (SSCP) <p>A Copy of the Certifications must be provided.</p>		

I.11 Technology Architect – Level 3

Resource Category: I.11 Technology Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
M5.1	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of ten (10) years' experience within the last fifteen (15) years working on Enterprise-class IT systems performing a minimum of six of the following tasks:</p> <ul style="list-style-type: none"> • Gathering and documenting business requirements; • Developing Systems Architecture; • Developing Logical and Physical cloud models; • Developing and Implementing architectural strategies and plans; • Contributing to overall project plans, testing strategies, security and infrastructure design; 		

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Resource Category: I.11 Technology Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Developing processes to enable the migration of data or workloads from source to destination systems; Contributing expertise and resolving Issues related to architectural challenges; and Reporting on progress to management using standard approaches and visualization (charts, etc.). <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M5.2	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last eight (8) years designing and architecting infrastructure services or applications leveraging a minimum of five of the following cloud technologies:</p> <ul style="list-style-type: none"> Elastic Computing Cloud storage and backup Networking (Firewalls, User Defined Routing) Application gateways and load balancing Database or DataWarehouse-as-a-Service Identity, Credential and Access Management <p>Note: To qualify, each project must have a minimum duration of six (6) months</p>		
M5.3	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of eighteen (18) months' experience in the last five (5) years (as of solicitation issue date) architecting and executing a solution to migrate an existing Enterprise-class secure* application or service to the cloud.</p> <p>*Secure is defined as meeting one of the following security control profiles:</p> <ul style="list-style-type: none"> the <u>Government of Canada Protected B Medium integrity Medium availability (PBMM)</u>. <u>FEDRAMP Moderate or High Level</u> <u>ISO 27001, ISO 27017 and ISO 27018</u> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		

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Resource Category: I.11 Technology Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
M5.4	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of two (2) years' experience within the last ten (10) years (as of solicitation issue date) designing, developing (coding), testing, implementing and supporting application solutions.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M5.5	<p>The Contractor MUST demonstrate that the Proposed Resource has:</p> <p>One of the following certifications applicable to Infrastructure as a Service (IaaS) platforms from one or more Leaders in the Gartner 2019 Magic Quadrant for IaaS Cloud (i.e. AWS, Azure, or Google):</p> <ul style="list-style-type: none"> • Azure Solutions Architect Expert • Amazon Solutions Architect Associate • Professional Cloud Architect (GCP) <p>A copy of the certificate(s) must be provided with the bid.</p>		

B.2 Business Architect – Level 3

Resource Category: B.2 Business Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
M6.1	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of ten (10) years' experience within the last fifteen (15) years performing all of the following tasks and activities for Large* organizations;</p>		

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Resource Category: B.2 Business Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Researching, defining and communicating the current business architecture for Information Technology service delivery using deliverables such as: Strategy Maps, Business Model Canvas, Value Chains, Business Capability Models, Business Process Models; Reviewing, Analyzing and evaluating emerging technologies, trends, business models and best practices to identify new services and delivery models that would better serve the clients or customers of the organization; Assessing an organizations' capacity and capability to undertake and deliver on an initiative or a change; and Researching, defining and communicating the value and Return on Investment (ROI) of proposed services and transformation initiatives through: Business Cases, Logic Models, Outcomes Registers, Benefits Realization Plans, and Key Performance Indicators (KPIs). <p>* Large organizations are defined as organizations having 2000 or more employees OR organizations having 1500 or more employees and multiple lines of business each with separate organization structures and strategic objectives</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M6.2	<p>The Contractor MUST demonstrate that the proposed resource has worked on a minimum of two (2) projects in the last five (5) years :</p> <ul style="list-style-type: none"> Guiding and leading people, process and organizational change in response to disruptive forces or opportunities towards desired business outcomes by meeting with variety* of project stakeholders to help build awareness and secure buy-in for cross-organization initiatives and release readiness Working with domain architects (information, data, application) and solution architects to align technical design decisions with business needs and goals <p>*Variety is defined as at least 3 different stakeholder groups (internal and/or external)</p>		

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Resource Category: B.2 Business Architect – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Bidder's Response	
		Demonstrate d experience (Bidders to insert data)	Insert page # of resume
	Note: To qualify, a project must have a minimum duration of six (6) months		

A.1 Application/Software Architect (Cloud Solutions) – Level 3

Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
M7.1	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of ten (10) years' experience* within the last fifteen (15) years performing all of the following tasks:</p> <ul style="list-style-type: none"> • Develop technical architectures, frameworks and strategies, to meet the business and application requirements; • Analyze and evaluate alternative technology solutions to meet business problems; • Ensure the integration of all aspects of technology solutions; • Evaluate existing procedures and methods, identify and document database content, structure, and application sub-systems, and develop data dictionary; • Define and document interfaces of manual to automated operations within application sub-systems, to external systems and between new and existing systems; and • Define input/output sources, including detailed plan for technical design phase, and obtain approval of the system proposal. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		

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Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
M7.2	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing <u>all</u> of the following tasks:</p> <ul style="list-style-type: none"> • Performing requirements analysis, data profiling, effort estimation for database design and documenting the results; • Translating complex technical terminology, concepts and issues in terms understandable to technical and nontechnical management and resources staff; • Developing and maintaining conceptual, logical, and physical diagrams of the applications, software, and database architectures for business critical applications; and • Ensuring projects adhered to client's application, data, and database standards and policies <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M7.3	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing <u>all</u> of the following tasks within a public cloud environment:</p> <ul style="list-style-type: none"> • Creating the conceptual, logical and physical designs for application architectures and their interoperability; • Researching, analyzing, recommending and selecting technical approaches to address challenging development and integration problems with application architectures; and • Developing implementation plans for the deployment of application architectures. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M7.4	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of three (3) years' experience within the last eight</p>		

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Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<p>(8) years designing and implementing cloud solutions employing 5 or more of the following cloud technologies and services:</p> <ul style="list-style-type: none"> • Elastic Computing • Cloud storage and backup • Automation • Network Virtual Appliances (Firewalls) • Application gateways and load balancing • Database-as-a-Service • Identity, Credential and Access Management <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M7.5	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of one (1) year experience designing and implementing cloud solutions for a public sector organization.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M7.6	<p>The Contractor MUST demonstrate that the Proposed Resource has:</p> <p>One of the following certifications applicable to Infrastructure as a Service (IaaS) platforms from one or more Leaders in the Gartner 2019 Magic Quadrant for IaaS Cloud (i.e. AWS, Azure, or Google):</p> <ul style="list-style-type: none"> • Azure Solutions Architect Expert • Amazon Solutions Architect Associate • Professional Cloud Architect (GCP) <p>A copy of the certificate(s) must be provided.</p>		

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A.7 Programmer/Analyst (Cloud Solutions) – Level 3

Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
M8.1	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last ten (10) years designing, developing, testing and deploying code and software for a cloud computing environment.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M8.2	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of seven (7) years' experience within the last ten (10) years designing, developing and implementing web-based applications using the following two languages:</p> <ul style="list-style-type: none"> • Java • Node JS <p>Note: The experience required is a combined total, however a minimum of 3 years must be demonstrated for EACH language.</p> <p>To qualify, a project must have a minimum duration of six (6) months.</p>		
M8.3	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of two (2) years' experience within the last five (5) years' refactoring and deploying Enterprise-class solutions.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months.</p>		
M8.4	<p>The Contractor MUST demonstrate that the Proposed Resource has a minimum of twelve (12) months experience within the last five (5) years coding, testing and implementing solutions involving Cloud-based identity access management, Multi-factor authentication AND one of the following:</p> <ul style="list-style-type: none"> • Biometric security models • Secure enclave processing 		

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Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<p>Note: To qualify, a project must have a minimum duration of six (6) months. The experience can be demonstrated in various combinations across different projects, however the minimum experience must be demonstrated for EACH one of the three bullets above.</p> <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		

I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3

Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
M9.1	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing all of the following tasks and responsibilities:</p> <ul style="list-style-type: none"> • Using methodologies from Machine Learning, Deep Learning and Artificial Intelligence; • Applying Machine Learning using diverse types of data, diverse data sources and different types of learning models; • Developing queries to isolate data with high value within a Data Warehouse, Data Mart or Data Lake; • Performing exploratory data analysis, rapid prototyping and presenting creative ideas to exploit data to drive deeper insights and business value; 		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Providing proactive data analysis of large structured and unstructured datasets involving a wide range of systems across multiple disparate data sets; and Developing data analytic and visualization plans to support high-quality, fact-based business decisions. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M9.2	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing a minimum of five (5) of the following tasks and activities:</p> <ul style="list-style-type: none"> Working with scalable data platforms such as; Power BI, Hadoop, Spark, Redshift, NoSQL (dynamoDB / MongoDB); Building the tools and supporting data structures needed to analyze data and perform data cleaning activities; Determining problematic issues with data and proposing feasible resolutions; Organizing, mapping, analyzing numerous data sets to incorporate them into one centralized data repository; Performing exploration of data, including analysis, mining of correlations and result verification; Developing and deploying solutions that addressed data aggregation challenges, including data being distributed across numerous databases or sources; and Developing and implementing strategies for data enrichment. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M9.3	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of three (3) years' experience within the last five (5) years performing a minimum of three (3) of the following tasks and activities;</p>		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Identifying opportunities for automation, knowledge discovery, decision-making, insights, optimization, and new capabilities; Developing frameworks and best practices for analytic solutions at different maturity levels; Preparing documentation, reports, and presentations that explain advanced analytics concepts, technology, and inner workings of solutions to broader teams, including non-technical audiences; and Mentoring other data scientists in the design, implementation, testing, prototyping, and deploying of data analytic solutions. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M9.4	<p>The Contractor MUST demonstrate the proposed resource holds:</p> <p>A Masters' degree in a quantitative discipline such as applied mathematics, computer science, data science, statistics or econometrics,</p> <p>OR</p> <p>An equivalent <i>Canadian academic credential assessment</i>, if obtained outside Canada.</p> <p>The Contractor must include a copy of the degree(s).</p>		

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I.1 Data Conversion Specialist (Cloud Data Migrations)– Level 3

Resource Category: I.1 Data Conversion Specialist (Cloud Data Migrations) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrated experience (Contractors to insert data)	Insert page # of resume
M10.1	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing <u>all</u> of the following tasks:</p> <ul style="list-style-type: none"> • Design, develop and administer significant (greater than 500 GB) DB2 databases; • Troubleshoot and optimize DB2 databases; and • Automate solutions for repeatable problems or maintenance activities. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M10.2	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing <u>all</u> of the following tasks:</p> <ul style="list-style-type: none"> • Conduct exploratory data analysis on databases to understand and identify data quality issues prior to a significant upgrade or migration of database; • Determine problematic issues with data and data structures and present findings to stakeholders; and • Identify, test and develop solutions to data quality problems or database performance issues. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M10.3	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of five (5) years' experience within the last ten (10) years performing <u>all</u> of the following tasks:</p> <ul style="list-style-type: none"> • Developing and planning data migration strategies for secure application migrations to the cloud; • Designing and building solutions, and using appropriate tools to migrate existing applications and their databases from an in-premise database environment to a secure cloud environment; 		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Migrations) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<ul style="list-style-type: none"> Developing data validation approach, test plan, scenarios and scripts, as necessary, to demonstrate completeness, integrity and security of the migrated data to the cloud; and Performing post-migration activities. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		
M10.4	<p>The Contractor MUST demonstrate that the proposed resource has a minimum of two (2) years' experience within the last ten (10) years performing a minimum of four (4) of the following tasks:</p> <ul style="list-style-type: none"> Migrating mainframe databases to a UNIX or LINUX platform; Designing, developing, or administering distributed databases; Developing, testing and executing data cleansing solutions; Developing scripts using bash, Perl and/or Python; and Using ETL tools such as DataStage. <p>Note: To qualify, a project must have a minimum duration of six (6) months</p>		

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C.11–Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3

Resource Category: C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
M11.1	The Contractor MUST demonstrate that the Proposed Resource has a minimum of five (5) years' experience within the last ten (10) years conducting IT Security vulnerability assessments.		
M11.2	<p>The Contractor MUST demonstrate that the proposed resource possesses a current professional certification from any of the following:</p> <ul style="list-style-type: none"> CISSP from (ISC) CISM from ISACA CRISC from ISACA GIAC / Any Int/Adv Cyber Security certification GIAC / Any Int/Adv Cyber Defense certification GIAC / Any Penetration Testing Certification CEH (Certified Ethical Hacker) GICSP GWAPT GWEB CISA <p>A copy of the Certification must be provided with the bid.</p>		
M11.3	<p>The Contractor MUST demonstrate that the Proposed Resource has experience in the past two (2) years performing Vulnerability Assessments and Penetration Testing for secure* public Cloud-based environments, services or solutions for five (5) different clients (separate legal entities) including <u>all</u> of the following activities:</p> <ul style="list-style-type: none"> • Conducting an assessment of the assets and data involved including the business value in addition to the technology/technical configuration involved; • Conducting thorough vulnerability scans and penetration testing to identify vulnerabilities that may leave the organization or data open to threats or theft; • Using automated vulnerability assessment tools; • Producing an actionable and prioritized list of deficiencies 		

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Resource Category: C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3			
Name of proposed Resource: _____			
Criteria	Mandatory Requirement	Contractor's Response	
		Demonstrate d experience (Contractors to insert data)	Insert page # of resume
	<p>with explanations and technical recommendations; and</p> <ul style="list-style-type: none"> Preparing a summary report for management. <p>Note: To qualify, a project must have a minimum duration of 20 days.</p> <p>* Secure is defined as designed to meet one of the following security control profiles:</p> <ul style="list-style-type: none"> the <u>Government of Canada Protected B Medium integrity Medium availability (PBMM)</u>. <u>FEDRAMP Moderate or High Level</u> <u>ISO 27001, ISO 27017 and ISO 27018</u> 		

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2.0 Point Rated Resource Assessment Criteria:

I.6 Network Analyst – Level 3

Resource Category: I.6 Network Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R1.1	<p>The Contractor should demonstrate that the Proposed Resource has additional experience, in excess of the minimum M1.2 mandatory requirement of five (5) years, designing and architecting Infrastructure solutions leveraging cloud technologies and services including all the following:</p> <ul style="list-style-type: none"> • Next Generation Firewalls • Virtual networks, subnets and User Defined Routing (UDR) • Multi-Protocol Label Switching • Security Groups • Application gateways and load balancing • Network failover • Containers • Elastic Computing • Storage and backup • Infrastructure as code <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>5+ years up to 6 years = 5 points</p> <p>6+ years up to 7 years = 10 points</p> <p>7+ years up to 8 years = 15 points</p> <p>More than 8 years = 20 points</p> <p>Maximum 20 points</p>		
R1.2	<p>The Contractor should demonstrate that the Proposed Resource has additional experience in excess of the minimum M1.3 mandatory requirement of eighteen (18) months within the past five (5) years (prior</p>	15	<p>18+ months up to 2 years = 5 points</p> <p>2+ years up to 3 years = 8 points</p> <p>3+ years up to 4 years = 12 points</p>		

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Resource Category: I.6 Network Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>to solicitation issue date) configuring, deploying, and supporting Virtual Networks, Next Generation Firewalls, routing and security groups within a Production Cloud environment designed to meet any of the following security control profiles:</p> <ul style="list-style-type: none"> the Government of Canada Protected B Medium integrity Medium availability (PBMM) Profile FEDRAMP Moderate or High Level ISO 27001, ISO 27017 and ISO 27018 <p>Note: A qualifying project will have a minimum duration of six (6) months</p>		More than 4 years = 15 points		
R1.3	<p>The Contractor should demonstrate that the Proposed Resource has Cloud experience within the last five (5) years performing the following tasks:</p> <ul style="list-style-type: none"> Exposed Virtual machines and cloud services in virtual networks to the Internet using an external load balance service. Utilized Security Groups and Access Control List (ACLs) for incoming and outgoing packets Designed User Defined Routes for specific cases to force tunneling to the Internet via an on-premise network. 	12	<p>For each task:</p> <p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 2 points</p> <p>More than 3 years = 3 points</p>		

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Resource Category: I.6 Network Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<ul style="list-style-type: none"> Designed BGP routes to enable dedicated direct cloud connections (e.g. ExpressRoute / Direct connection) between an on-premise data center and a cloud environment. <p>Note: A qualifying project will have a minimum duration of six (6) months</p>				
R1.4	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last 5 years (as of solicitation issue date) designing, deploying and supporting cloud network infrastructure and services hosted on Amazon Web Services.</p> <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	5	<p>Less than 1 year = 0 points</p> <p>1 year up to 2 years = 1 point</p> <p>2+ years up to 3 years = 3 points</p> <p>More than 3 years = 5 points</p>		
R1.5	<p>The Contractor should demonstrate that the Proposed Resource has a current and valid Firewall Administrator certification from a Next Generation Firewall vendor (e.g. Cisco, Fortinet, Palo Alto, etc.).</p> <p>A copy of the certificate(s) should be provided with the bid.</p>	5	<p>No certificates = 0 points</p> <p>1 or more Certificate(s) = 5 points</p>		
R1.6	<p>The Contractor should demonstrate that the Proposed Resource has:</p>	5	<p>No Degree/Diploma = 0 points</p>		

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Resource Category: I.6 Network Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>		Degree/Diploma = 5 points		
MAX. AVAILABLE POINTS		62			
MIN. POINTS REQUIRED		40			

I.7 Platform Analyst – Level 3

Resource Category: I.7 Platform Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R2.1	<p>The Contractor should demonstrate that the Proposed Resource has:</p> <p>A university degree or post-secondary diploma in Computer Science or a related field in Information Technology,</p>	5	<p>No Degree/Diploma = 0 points</p> <p>Degree/Diploma = 5 points</p>		

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Resource Category: I.7 Platform Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Bidder's Response		
			Point Grid	Demonstrated Experience	Insert Page # of Resume
	<p>obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>				
R2.2	<p>The Contractor should demonstrate that the Proposed Resource has experience implementing one or more of the following security patterns within an IT solution:</p> <ul style="list-style-type: none"> • System and method for generating and authenticating passwords using key inputs and contextual inputs • Method and system for authenticating a security device • Method and system for establishing trusted communication using a security device <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>Up to 5 points per project for a maximum of 4 projects as follows:</p> <p>1 pattern = 2 points 2 patterns = 4 points 3 patterns = 5 points</p>		
R2.3	<p>The Contractor should demonstrate that the Proposed Resource has:</p>	20	<p>Less than 5 technologies = 0 points</p>		

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Resource Category: I.7 Platform Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>Implementation experience with at least 5 of the following technologies;</p> <ul style="list-style-type: none"> • FIDO2 • Okta • Gluu • RSA encryption • Ping Identity • WSO2 • Auth0 • Google Duo • ForgeRock • Azure Active Directory • AWS Active Directory <p>Note: A qualifying project will have a minimum duration of three (3) months</p>		<p>5 to 6 technologies = 10 points</p> <p>7 to 8 technologies = 15 points</p> <p>9 or more technologies = 20 points</p>		
R2.4	<p>The Contractor should demonstrate that the Proposed Resource has experience developing and implementing cloud-based applications using one or both of the following:</p> <ul style="list-style-type: none"> • Java • Node JS <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	10	<p>Less than 2 years = 0 points</p> <p>2 years up to 3 years = 6 points</p> <p>3+ years up to 5 years = 8 points</p> <p>More than 5 years = 10 points</p>		
R2.5	<p>The Contractor should demonstrate that the Proposed Resource has experience designing and implementing Hybrid Cloud Enterprise solutions.</p> <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 10 points</p> <p>3+ years up to 5 years = 15 points</p> <p>More than 5 years = 20 points</p>		

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Resource Category: I.7 Platform Analyst – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R2.6	The Contractor should demonstrate that the proposed resource has experience implementing and supporting solutions hosted on Amazon Web Services.	5	Less than 1 year = 0 points 1 year up to 2 years = 1 point 2+ years up to 3 years = 3 points More than 3 years = 5 points		
MAX. AVAILABLE POINTS		80			
MIN. POINTS REQUIRED		52			

I.9 System Administrator – Level 3

Resource Category: I.9 System Administrator – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R3.1	The Contractor should demonstrate that the Proposed Resource has: A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR An equivalent Canadian academic credential assessment , if obtained outside Canada. A copy of the university degree, college diploma or academic credential assessment WILL be	5	No Degree/Diploma = 0 points Degree/Diploma = 5 points		

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Resource Category: I.9 System Administrator – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.				
R3.2	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last ten (10) years performing the following tasks in a Cloud environment:</p> <ul style="list-style-type: none"> Deploying and managing Highly Available, resilient cloud resources with no single points of failure; Performing system hardening on newly provisioned environments; Developing and utilizing automation techniques to allocate additional resources as and when needed; and Designing and implementing a tiered backup and restore strategy for data of varying values to the organization. <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>For each task:</p> <p>Less than 1 year = 0 points</p> <p>1 year up to 2 years = 1 point</p> <p>2+ years up to 4 years = 2 points</p> <p>4+ years up to 6 years = 3 points</p> <p>6+ years up to 7 years = 4 points</p> <p>More than 7 years = 5 points</p>		
R3.3	The Contractor should demonstrate that the Proposed Resource has experience within the last ten (10) years managing system resources using VMWare products.	10	<p>Less than 2 years = 0 points</p> <p>2+ years up to 5 years = 5 points</p> <p>5+ years up to 8 years = 7 points</p>		

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Resource Category: I.9 System Administrator – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max		Bidder's Response	
			Point Grid	Demonstrated Experience	Insert Page # of Resume
			More than 8 years = 10 points		
R3.4	<p>The Contractor should demonstrate that the Proposed Resource has experience developing, testing, maintaining and executing automated provisioning and rebuild procedures for Cloud application resources.</p> <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	10	<p>Less than 2 years = 0 points</p> <p>2+ years up to 5 years = 5 points</p> <p>5+ years up to 8 years = 7 points</p> <p>More than 8 years = 10 points</p>		
R3.5	<p>The Contractor should demonstrate that the Proposed Resource has any of the following Associate-level certifications:</p> <ul style="list-style-type: none"> • Microsoft Certified Azure Administrator Associate OR Microsoft 365 Certified Security Administrator Associate OR MCSE Cloud Platforms and Infrastructure • AWS Certified SysOps Administrator Associate • Associate Cloud Engineer (GCP) <p>A copy of the certificate(s) should be provided.</p>	10	<p>No Certification = 0 points</p> <p>1 Certification = 5 points</p> <p>2 Certifications or more = 10 points</p>		
MAX. AVAILABLE POINTS		55			
MIN. POINTS REQUIRED		35			

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I.10 Technical Architect (Cloud Security) – Level 3

Resource Category: I.10 Technical Architect (Cloud Security) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R4.1	<p>The Contractor should demonstrate that the Proposed Resource has:</p> <p>A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>	10	<p>No Degree/Diploma = 0 points</p> <p>Degree/Diploma = 10 points</p>		
R4.2	<p>The Contractor should demonstrate that the Proposed Resource has additional experience in excess of M4.2 minimum 5 years mandatory requirement, including 3 years in a Cloud environment, performing the following tasks:</p> <ul style="list-style-type: none"> Defining Technical and Functional security requirements; Creating Security Architecture; Participating in Infrastructure and Application Architecture Reviews; Participating in 	20	<p>5+ years up to 7 years = 8 points</p> <p>7+ years up to 8 years = 14 points</p> <p>More than 8 years = 20 points</p>		

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Resource Category: I.10 Technical Architect (Cloud Security) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	Infrastructure and Application Design Reviews; and <ul style="list-style-type: none"> Performing IT Certification or Assessment activities Note: A qualifying project will have a minimum duration of three (3) months				
R4.3	The Contractor should demonstrate that the Proposed Resource has experience preparing Threat & Risk Assessments on Cloud-based applications for government projects/initiatives involving any of the following: <ul style="list-style-type: none"> Biometric identification Multi-factor authentication, secure enclave processing Mobile device-based multi factor authentication Cloud-based Identity Access Management Artificial Intelligence or Machine Learning Robotic Process Automation Analytic Pipelines Note: A qualifying project will have a minimum duration of two (2) months.	25	1 project = 5 points 2 projects = 10 points 3 projects = 15 points 4 projects = 20 points 5+ projects = 25 points		
R4.4	The Contractor should demonstrate that the Proposed Resource has experience completing Security assessments of infrastructure or applications within Microsoft	20	2 points per assessment up to maximum of 10 assessments		

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Resource Category: I.10 Technical Architect (Cloud Security) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	Azure, AWS or GCP cloud environments Note: A qualifying assessment will have a minimum duration of two (2) months.				
R4.5	The Contractor should demonstrate that the Proposed Resource has experience designing architecture, applications or infrastructure incorporating security controls according to OWASP recommendations. Note: A qualifying project will have a minimum duration of six (6) months	20	Less than 1 year = 0 points 1 year up to 3 years = 5 points 3+ years up to 5 years = 10 points 5+ years up to 7 years = 15 points More than 7 years = 20 points		
MAX. AVAILABLE POINTS		95			
MIN. POINTS REQUIRED		61			

I.11 Technology Architect – Level 3

Resource Category: I.11 Technology Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R5.1	The Contractor should demonstrate that the Proposed Resource has: A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized	10	No Degree/Diploma = 0 points Degree/Diploma = 10 points		

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Resource Category: I.11 Technology Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrate Experience	Insert Page # of Resume
	<p>Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the bid. The copy WILL be a readable copy in English or French.</p>				
R5.2	<p>The Contractor should demonstrate that the Proposed Resource has experience performing the following tasks supporting Legacy-to-Cloud application migration projects:</p> <ul style="list-style-type: none"> Collecting relevant data on customer's existing applications including: architecture, workloads, services, data volumes, users, support requirements, network and other infrastructure requirements; Conducting cloud assessments and analysis of workloads and services to determine which workloads are good candidates for migration; Mapping source environment resources/services to target resources/services; Defining and designing appropriate to-be application, platforms, and hosting architectures in public/private clouds; 	30	10 points per project up to maximum of 3 projects (30 points)		

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Resource Category: I.11 Technology Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrate Experience	Insert Page # of Resume
	<ul style="list-style-type: none"> Designing cloud architecture that meets key non-functional requirements (security, compliance, performance, resiliency, and availability); Overseeing the migration of workloads and capabilities (e.g. Disaster recovery, archiving/backup) to cloud; and Leveraging cloud specific services (e.g. Web Application PaaS, Resource Manager, etc.) to implement desired cloud operating models and enable DevOps capabilities. <p>Note: A qualifying project will have a minimum duration of nine (9) months and contain completion of at least three of the listed tasks.</p>				
R5.3	<p>The Contractor should demonstrate that the Proposed Resource has experience with large or complex* data migrations including five or more of the following:</p> <ul style="list-style-type: none"> Developing the strategy Creating the plan Analyzing data quality Resolving data issues Validating accuracy, performance, accessibility, security and reliability Loading Switch-over Optimization <p>* Large or complex describes a database that contains a</p>	20	<p>5 to 6 tasks = 5 points</p> <p>7 to 8 tasks = 10 points</p> <p>Plus 10 points for the number of years of experience as follows:</p> <p>1 year up to 3 years = 2 points</p> <p>3+ years up to 4 years = 5 points</p> <p>4+ years up to 5 years = 8 points</p>		

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Resource Category: I.11 Technology Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrate Experience	Insert Page # of Resume
	significant volume of data (more than 250 GB) or a broad data structure with many relationships defined to the point that queries and normal operations require specialized application and database optimization approaches. Note: A qualifying project will have a minimum duration of six (6) months		More than 5 years = 10 points		
R5.4	The Contractor should demonstrate that the Proposed Resource has experience architecting and migrating on-premise Enterprise-class applications to an environment hosted on one of the Gartner 2019 Magic Quadrant for IaaS cloud platforms (AWS, Azure or Google) using a Hybrid cloud deployment model. Note: A qualifying project will have a minimum duration of six (6) months	15	1 project = 3 points 2 projects = 6 points 3 projects = 10 points 4 or more projects = 15 points		
R5.5	The Contractor should demonstrate that the Proposed Resource has experience with one of the following activities and tasks in a Cloud environment: <ul style="list-style-type: none"> Designing data warehousing as a service solutions Designing data lakes that scale with ingested data but also discard data due to low value or if it contravenes policy to retain it 	5	0 projects = 0 points 1+ project = 5 points		

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Resource Category: I.11 Technology Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	Note: A qualifying project will have a minimum duration of twelve (12) months				
MAX. AVAILABLE POINTS		80			
MIN. POINTS REQUIRED		52			

B.2 Business Architect – Level 3

Resource Category: B.2 Business Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R6.1	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last ten (10) years supporting initiatives by:</p> <ul style="list-style-type: none"> Assessing transformation initiative impacts on job roles and organization structures; AND Making recommendations as to the best use of public funds <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>Less than 5 years = 0 points</p> <p>5 years up to 6 years = 8 points</p> <p>6+ years up to 7 years = 12 points</p> <p>7+ years up to 8 years = 16 points</p> <p>More than 8 years = 20 points</p>		
R6.2	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last ten (10) leading* Agile or Digital Transformation</p>	20	<p>1 project = 10 points</p> <p>2 projects = 15 points</p> <p>3+ projects = 20 points</p>		

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Resource Category: B.2 Business Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>initiatives within a public sector organization.</p> <p>*Leading – Defined as the person in charge of the day to day activities of the project.</p> <p>Note: A qualifying project will have a minimum duration of six (6) months</p>				
R6.3	<p>The Contractor should demonstrate that the proposed resource has:</p> <p>One (1) of the following certifications:</p> <ul style="list-style-type: none"> Agile (Scrum.org, Agile Alliance, PMI) Change Management (PROSCII, Six Sigma, CCMP, ACMP) <p>A copy of the Certification will be provided</p>	10	<p>0 certification = 0 points</p> <p>1 or more certifications = 10 points</p>		
R6.4	<p>The Contractor should demonstrate that the proposed resource has:</p> <p>A post-graduate degree, post-graduate diploma, post-graduate certificate or industry certification related to Business Architecture (not used for any other criteria); OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the post-graduate degree, diploma, certificate or academic credential</p>	10	<p>0 document = 0 points</p> <p>1 or more degree, diploma or certificate = 10 points</p>		

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Resource Category: B.2 Business Architect – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.				
MAX. AVAILABLE POINTS		60			
MIN. POINTS REQUIRED		39			

A.1 Application/Software Architect (Cloud Solutions) – Level 3

Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R7.1	<p>The Contractor should demonstrate that the Proposed Resource has:</p> <p>A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>	10	<p>No Degree/Diploma = 0 points</p> <p>Degree/Diploma = 10 points</p>		

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Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R7.2	<p>The Contractor should demonstrate that the Proposed Resource has experience in excess of the minimum five (5) years within the last ten (10) years mandatory requirement in M7.3 performing the following tasks within a public cloud environment:</p> <ul style="list-style-type: none"> Creating the conceptual, logical and physical designs for application architectures and their interoperability; Researching, analyzing, recommending and selecting technical approaches to address challenging development and integration problems with application architectures; and Developing implementation plans for the deployment of application architectures <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>5+ years up to 6 years = 5 points</p> <p>6+ years up to 7 years = 10 points</p> <p>7+ years up to 8 years = 15 points</p> <p>More than 8 years = 20 points</p>		
R7.3	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last twelve (12) years as an Application/Software Architect performing the following activities:</p> <ul style="list-style-type: none"> Developing deployment strategies for architectures in the cloud that included secure remote access such as VPN gateways (client to gateway, gateway to gateway); 	15	<p>For each activity:</p> <p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 2 points</p> <p>3+ years up to 5 years = 4 points</p> <p>More than 5 years = 5 points</p>		

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Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<ul style="list-style-type: none"> Developing deployment strategies for cloud architectures that included private (on-premise) networks for the storage and processing of more sensitive data; Developing deployment strategies for architectures of re-usable environments designed to test new data or application operations without affecting production usage. <p>Note: A qualifying project will have a minimum duration of six (6) months</p>				
R7.4	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last twelve (12) years as an Application / Software Architect performing the following activities:</p> <ul style="list-style-type: none"> Incorporating serverless code in application architectures; Designing scaling sets of virtual machines to keep costs low while still providing acceptable response times during peak usage; Designing cloud-based authentication solutions allowing for single sign-on (SSO) among applications; and Designing cloud-based authentication solutions that implement multi-factor authentication. 	20	<p>For each activity:</p> <p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 2 points</p> <p>3+ years up to 5 years = 4 points</p> <p>More than 5 years = 5 points</p>		

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Resource Category: A.1 Application/Software Architect (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	Note: A qualifying project will have a minimum duration of six (6) months				
R7.5	<p>The Contractor should demonstrate that the Proposed Resource has experience within the last twelve (12) years as an Application/Software Architect performing any of the following tasks:</p> <ul style="list-style-type: none"> Developing deployment strategies for business intelligence tools within cloud architecture that address both structured and unstructured data; Designing data warehouse-as-a-service solutions; Designing data lakes that scale with ingested data but also discard data due to low value or if it contravenes policy to retain it <p>Note: A qualifying project will have a minimum duration of twelve (12) months</p>	5	<p>0 projects = 0 points</p> <p>1+ project = 5 points</p>		
MAX. AVAILABLE POINTS		70			
MIN. POINTS REQUIRED		45			

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A.7 Programmer/Analyst (Cloud Solutions) – Level 3

Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R8.1	<p>The Contractor should demonstrate that the proposed resource has experience, in excess of the minimum 5 years mandatory requirement in M8.1, designing, developing, testing and deploying code and software for a cloud computing environment.</p> <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	20	<p>5+ years to 6 years = 12 points</p> <p>6+ years to 7 years = 16 points</p> <p>More than 7+ years = 20 points</p>		
R8.2	<p>The Contractor should demonstrate that the proposed resource has:</p> <p>One (1) of the following certifications applicable to Infrastructure as a Service (IaaS) platforms from one or more Leaders in the Gartner 2019 Magic Quadrant for IaaS Cloud (i.e. AWS, Azure, or Google):</p> <ul style="list-style-type: none"> • AWS Certified Developer • Azure Developer Associate • Google Professional Cloud Developer <p>Note: A copy of the certification should be provided.</p>	10	<p>0 Certifications = 0 points</p> <p>1 or more Certifications = 10 points</p>		
R8.3	<p>The Contractor should demonstrate that the proposed resource has experience designing, developing, testing and</p>	6	<p>0 projects = 0 points</p> <p>1 project = 2 points</p>		

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Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>deploying code and software for one or more of the following types of solution projects:</p> <ul style="list-style-type: none"> • Mobile computing • Artificial Intelligence or Machine Learning • Robotic process automation • Biometrics • Analytic Pipelines <p>Note: A qualifying project will have a minimum duration of twelve (12) months</p> <p>Projects should be fully described including the platform, technology and specific features/functionalities (high-level) deployed.</p>		<p>2 projects = 4 points</p> <p>3+ projects = 6 points</p>		
R8.4	<p>The Contractor should demonstrate that the proposed resource has experience designing, developing, testing and deploying code and software for web-based solutions including the following:</p> <ul style="list-style-type: none"> • back-end and web-tier components for data collected externally (to the organization) and/or internally; • application code to process the data in some manner • security controls 	15	<p>Less than 3 years = 0 points</p> <p>3 years up to 4 years = 10-points</p> <p>4+ years up to 5 years = 12 points</p> <p>More than 5 years = 15 points</p>		

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Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>Note: A qualifying project will have a minimum duration of six (6) months.</p> <p>Projects should be described including the architecture, data collected (including source/method) and processing functionality (ies) deployed.</p>				
R8.5	<p>The Contractor should demonstrate that the proposed resource has experience designing, developing and implementing web-based applications using the following languages:</p> <ul style="list-style-type: none"> • Python, • Vue JS, • Angular <p>Note: A qualifying project will have a minimum duration of six (6) months</p>	15	<p>Points will be allocated per language as follows:</p> <p>Less than 2 years = 0 points</p> <p>2 years up to 3 years = 2 points</p> <p>3+ years up to 4 years = 3 points</p> <p>4+ years up to 5 years = 4 points</p> <p>More than 5 years = 5 points</p>		
R8.6	<p>The Contractor should demonstrate that the proposed resource has experience in reverse engineering legacy software applications created in one or more of the following:</p> <ul style="list-style-type: none"> • COBOL (Mainframe) • C/C++ • J2EE <p>Note: A qualifying project will have a minimum duration of six (6) months.</p>	5	<p>Less than 1 year = 0 points</p> <p>More than 1 year = 5 points</p>		

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Resource Category: A.7 Programmer/Analyst (Cloud Solutions) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R8.7	The Contractor should demonstrate that the proposed resource has experience developing and deploying applications using AWS Developer tools.	4	Less than 1 year = 0 points 1 year up to 3 years = 2 points More than 3 years = 4 points		
R8.8	The Contractor should demonstrate that the Proposed Resource has: A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR An equivalent Canadian academic credential assessment , if obtained outside Canada. A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.	5	No Degree/Diploma = 0 points Degree/Diploma = 5 points		
MAX. AVAILABLE POINTS		80			
MIN. POINTS REQUIRED		52			

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I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3

Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R9.1	<p>The Contractor should demonstrate that the proposed resource has experience in excess of the mandatory minimum 5 years requirement in M9.1 performing all of the following activities:</p> <ul style="list-style-type: none"> • Using methodologies from Machine Learning, Deep Learning and Artificial Intelligence; • Applying Machine Learning using diverse types of data, diverse data sources and different types of learning models. • Developing queries to isolate data with high value within a Data Warehouse, Data Mart or Data Lake; • Performing exploratory data analysis, rapid prototyping and presenting creative ideas to exploit data to drive deeper insights and business value; • Providing proactive data analysis of large structured and unstructured datasets involving a wide range of systems across multiple disparate data sets; and • Developing data analytic / visualization plans to support high-quality, fact-based business decisions 	20	<p>5+ years up to 6 years = 5 points</p> <p>6+ years up to 7 years = 10 points</p> <p>7+ years up to 8 years = 15 points</p> <p>More than 8 years = 20 points</p>		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	Note: A qualifying project will have a minimum duration of six (6) months				
R9.2	<p>The Contractor should demonstrate that the proposed resource has experience in excess of the mandatory minimum 5 years requirement in M9.2 performing five or more of the following activities:</p> <ul style="list-style-type: none"> Working with scalable data platforms such as; Power BI, Hadoop, Spark, Redshift, NoSQL (dynamoDB / MongoDB); Building the tools and supporting data structures needed to analyze data and perform data cleansing activities; Determining problematic issues with data and proposing feasible resolutions; Organizing, mapping, analyzing numerous data sets to incorporate them into one centralized data repository; Performing exploration of data, including analysis, mining of correlations and result verification; Developing and deploying solutions that addressed data aggregation challenges, including data being distributed across numerous databases or sources; and Developing and implementing strategies 	20	<p>5+ years up to 6 years = 5 points</p> <p>6+ years up to 7 years = 10 points</p> <p>7+ years up to 8 years = 15 points</p> <p>More than 8 years = 20 points</p>		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	for data enrichment Note: A qualifying project will have a minimum duration of six (6) months.				
R9.3	The Contractor should demonstrate that the proposed resource has experience within the last ten (10) years developing and testing custom algorithms and mathematical models as required to solve unique business challenges: Note: A qualifying project will have a minimum duration of six (6) months.	20	Less than 2 years = 0 points 2 years up to 5 years = 5 points 5+ years up to 6 years = 10 points 6+ years up to 7 years = 15 points More than 7 years = 20 points		
R9.4	The Contractor should demonstrate that the proposed resource has experience within the last ten (10) years performing the following tasks: <ul style="list-style-type: none"> Developing strategies to develop and filter data sets related to macroeconomic models within Data Lakes; and Developing visualizations relating to macroeconomic models. Note: A qualifying project will have a minimum duration of six (6) months.	20	Less than 2 years = 0 points 2 years up to 5 years = 5 points 5+ years up to 6 years = 10 points 6+ years up to 7 years = 15 points More than 7 years = 20 points		
R9.5	The Contractor should demonstrate that the proposed resource has experience within the last ten	20	Less than 2 years = 0 points 2+ years up to 5 years = 5 points		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Scientist)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>(10) years performing the following tasks:</p> <ul style="list-style-type: none"> Developing strategies to develop and filter large (greater than 250GB) data sets for reports and analysis; Designing data transformation routines to be performed on data sources being ingested; and Performing data extract and load operations as required <p>Note: A qualifying project will have a minimum duration of six (6) months.</p>		<p>5+ years up to 6 years = 10 points</p> <p>6+ years up to 7 years = 15 points</p> <p>More than 7 years = 20 points</p>		
R9.6	<p>The Contractor should demonstrate that the proposed resource has completed or obtained:</p> <p>A post-graduate diploma, post-graduate certificate or industry certification related to any of the following:</p> <ul style="list-style-type: none"> - Data Science; - Machine Learning - Artificial Intelligence - Natural Language Programming <p>The Contractor should include a copy of the diploma(s) or certificate(s).</p>	10	<p>No diploma/certificate = 0 points</p> <p>1+ post-graduate diploma/certificate = 10 points</p>		
MAX. AVAILABLE POINTS		110			
MIN. POINTS REQUIRED		71			

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I.1 Data Conversion Specialist (Cloud Data Migrations)– Level 3

Resource Category: I.1 Data Conversion Specialist (Cloud Data Migrations)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R10.1	<p>The Contractor should demonstrate that the Proposed Resource has:</p> <p>A university degree or post-secondary diploma in Computer Science or a related field in Information Technology, obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>	5	<p>No Degree/Diploma = 0 points</p> <p>Degree/Diploma = 5 points</p>		
R10.2	<p>The Contractor should demonstrate that the Proposed Resource has experience architecting and migrating Production data into a cloud environment designed to meet any of the following security control profiles:</p> <ul style="list-style-type: none"> the <u>Government of Canada Protected B Medium integrity Medium availability (PBMM) Profile</u>. <u>FEDRAMP Moderate or High Level</u> 	20	<p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 8 points</p> <p>3+ years up to 4 years = 14 points</p> <p>More than 4 years = 20 points</p>		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Migrations)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<ul style="list-style-type: none"> ISO 27001, ISO 27017 and ISO 27018 <p>Note: A qualifying project will have a minimum duration of six (6) months</p>				
R10.3	<p>The Contractor should demonstrate that the Proposed Resource has:</p> <p>One or more of the following certifications:</p> <ul style="list-style-type: none"> Azure Solutions Architect Expert Amazon Solutions Architect Associate Professional Cloud Architect (GCP) <p>A copy of the certificate(s) should be provided.</p>	10	<p>0 certification = 0 points</p> <p>1 or more certifications = 10 points</p>		
R10.4	<p>The Contractor should demonstrate that the Proposed Resource has additional experience, in excess of the minimum of five (5) years of demonstrated experience as per Mandatory Criteria M10.3, performing all of the following tasks:</p> <ul style="list-style-type: none"> Developing and planning data migration strategies for secure application migrations to the cloud; Designing and building solutions and/or use appropriate tools to migrate existing applications and their databases from an in-premise database 	20	<p>5+ years up to 6 years = 12 points</p> <p>6+ years up to 7 years = 16 points</p> <p>More than 7 years = 20 points</p>		

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Resource Category: I.1 Data Conversion Specialist (Cloud Data Migrations)– Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	environment to a secure cloud environment; <ul style="list-style-type: none"> Developing data validation approach, test plan, scenarios and scripts as necessary to demonstrate completeness, integrity and security of the migrated data to the cloud; and Performing post-migration activities. <p>Note: A qualifying project will have a minimum duration of six (6) months</p>				
R10.5	The Contractor should demonstrate that the proposed resource has experience using AWS online and offline Data Migration tools.	8	Less than 1 year = 0 points 1 year up to 3 years = 2 points 3+ years up to 4 years = 4 points 4+ years up to 5 years = 6 points More than 5 years = 8 points		
MAX. AVAILABLE POINTS		63			
MIN. POINTS REQUIRED		40			

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C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3

Resource Category: C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
R11.1	<p>The Contractor should demonstrate that the Proposed Resource has system administrative, design, development or support experience in the following areas:</p> <ul style="list-style-type: none"> • Public Cloud Infrastructure • Secure Application Development • Virtual Networking • Big Data • Cloud Security <p>Note: A qualifying project will have a minimum duration of six (6) months and can be used to demonstrate more than one area.</p>	10	<p>For each area:</p> <p>Less than 1 year = 0 points</p> <p>More than 1 year = 2 points</p>		
R11.2	<p>The Contractor should demonstrate that the Proposed Resource has experience analyzing security event logs from operating systems, intrusion detection systems, network, and remote access solutions</p> <p>Note: A qualifying project will have a minimum duration of three (3) months</p>	10	<p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 2 points</p> <p>3+ years up to 5 years = 5 points</p> <p>More than 5 years = 10 points</p>		
R11.3	<p>The Contractor should demonstrate that the Proposed Resource has experience testing web and/or mobile application security for the OWASP Top 10 Most Critical Application Security Risks and providing assistance and</p>	20	<p>Less than 1 year = 0 points</p> <p>1 year up to 3 years = 10 points</p>		

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Resource Category: C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	guidance to developers to ensure a high level of application security. Note: A qualifying project will have a minimum duration of three (3) months		3+ years up to 5 years = 15 points More than 5 years = 20 points		
R11.4	The Contractor should demonstrate that the Proposed Resource has experience performing Vulnerability Assessments and Penetration Testing for public Cloud-based environments, services or solutions including the following activities: <ul style="list-style-type: none"> Conducting thorough vulnerability scans and penetration testing to identify vulnerabilities that may leave the organization or data open to threats or theft; and Producing an actionable and prioritized list of deficiencies with explanations and technical recommendations Note: A qualifying project will have a minimum duration of 20 days.	30	3 points per project		
R11.5	The Contractor should demonstrate that the Proposed Resource has: A university degree or post-secondary diploma in Computer Science or a related	10	No Degree/Diploma = 0 points Degree/Diploma = 10 points		

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Resource Category: C.11 Information Technology Security Vulnerability Analysis Specialist (Cloud) – Level 3					
Name of proposed Resource: _____					
#	Point-Rated Requirement	Points Max	Point Grid	Bidder's Response	
				Demonstrated Experience	Insert Page # of Resume
	<p>field in Information Technology, obtained through a recognized Canadian university or college; OR</p> <p>An equivalent Canadian academic credential assessment, if obtained outside Canada.</p> <p>A copy of the university degree, college diploma or academic credential assessment WILL be included with the Contractor's response to the TA. The copy WILL be a readable copy in English or French.</p>				
MAX. AVAILABLE POINTS		80			
MIN. POINTS REQUIRED		52			

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APPENDIX D TO ANNEX A CERTIFICATIONS AT THE TA STAGE

The following Certifications are to be used, as applicable. If they apply, they must be signed and attached to the Contractor's quotation when it is submitted to Canada.

1. CERTIFICATION OF EDUCATION AND EXPERIENCE

The Contractor certifies that all the information provided in the résumés and supporting material proposed for completing the subject work, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Contractor to be true and accurate. Furthermore, the Contractor warrants that every individual proposed by the Contractor for the requirement is capable of performing the Work described in the Task Authorization.

Print name of authorized individual & sign above

Date

2. CERTIFICATION OF AVAILABILITY OF PERSONNEL

The Contractor certifies that, should it be authorized to provide services under this Task Authorization, the persons proposed in the quotation will be available to commence performance of the work within a reasonable time from the date of issuance of the valid Task Authorization, or within the time specified in the TA Form, and will remain available to perform the work in relation to the fulfillment of the requirement.

Print name of authorized individual & sign above

Date

3. CERTIFICATION OF STATUS OF PERSONNEL

If the Contractor has proposed any individual who is not an employee of the Contractor, the Contractor certifies that it has permission from that individual to propose his/her services in relation to the Work to be performed under this TA and to submit his/her résumé to Canada. At any time during the Contract Period the Contractor must, upon request from the Contracting Authority, provide the written confirmation, signed by the individual, of the permission that was given to the Contractor of his/her availability. Failure to comply with the request may result in a default under the Contract in accordance with the General Conditions.

Print name of authorized individual & sign above

Date

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4. CERTIFICATION OF LANGUAGE - [English or Bilingual or French]

The Contractor certifies that the proposed resource(s) in response to this draft Task Authorization is/are *[Option 1 - Unilingual English]* fluent in English. The individual(s) proposed must be able to communicate orally and in writing in English without any assistance and with minimal errors.

[Option 2 - Bilingual] fluent in both official languages of Canada (French and English). The individual(s) proposed must be able to communicate orally and in writing in French and English without any assistance and with minimal errors.

[Option 3 - Unilingual French] fluent in French. The individual(s) proposed must be able to communicate orally and in writing in French without any assistance and with minimal errors.

Print name of authorized individual & sign above

Date

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APPENDIX E TO ANNEX A

GLOSSARY OF DEFINITIONS

Term	Context
Analytic Pipeline	An analytic pipeline is a tool for collecting data from applications and various other sources, could include a transformational or cleansing step, could include some further processing or matching and then subjecting the data to analysis in order to produce a result within a certain timeframe. This is done separately from the production applications in order to avoid degradation in performance.
AWS	Amazon Web Services Amazon Web Services is a subsidiary of Amazon that provides on-demand cloud computing platforms and APIs to individuals, companies, and governments, on a metered pay-as-you-go basis.
Border Gateway Protocol BGP	Border Gateway Protocol is a standardized exterior gateway protocol designed to exchange routing and reachability information among autonomous systems on the Internet. The protocol is classified as a path vector protocol. Source: Wikipedia
Canadian academic credentials assessment	An Educational Credential Assessment is a statement of the general comparability of international educational credentials to a completed Canadian educational credential. The Canadian Information Centre for International Credentials (CICIC) assists persons who wish to obtain an assessment of their educational, professional, and occupational credentials by referring them to the appropriate organizations.
Configuration ¹	Configuration is the arrangement, relationships and customizations of hardware and/or software components that make up a computer system to enable the system to perform its intended use based on given requirements.
Configuration ²	Configuration is the activity of arranging and/or customizing the hardware and/or software components that make up a computer system to enable the system to perform its intended use based on given requirements.
Elastic Computing	Concept in cloud computing in which computing resources can be scaled up and down easily by the cloud service provider. Elastic computing is the ability of a cloud service provider to provision flexible computing power when and wherever required. The elasticity of these

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Term	Context
	<p>resources can be in terms of processing power, storage, bandwidth, etc.</p> <p>Source: Techopedia</p>
Enterprise-Class	<p>Enterprise-class refers to applications or infrastructure services that are designed to be robust and scalable across a large organization. Gartner defines Enterprise-class as the ability of a given tool or product to handle complex processes or services.</p> <p>Further characteristics include: Open and compatible with existing databases and tools; Powerful enough to scale up along with the needs of the business using it; Secure from outside threats and data leaks.</p>
Enterprise Cloud Security Solution	<p>An Enterprise Cloud Security Solution is a comprehensive and unified suite of third-party configurable tools and practices that secure cloud-based network infrastructure, applications, connectivity, communications and data through native integration, heterogeneous protection, automation and management (policies, controls and visibility). They are specifically designed for cloud deployment and provide maximum security with minimal overhead. They support various operating environments including High Availability and auto-scaling. They provide automated threat monitoring, recognition and response.</p>
Enterprise Solution	<p>Enterprise solutions are designed to integrate multiple facets of a company's business through the interchange of information from various business process areas and related databases. These solutions enable companies to retrieve and disseminate mission-critical data throughout the organization, providing managers with real-time operating information.</p> <p>Source: Gartner</p>
GCP	<p>Google Cloud Platform</p> <p>Google Cloud Platform is a suite of public cloud computing services offered by Google. The platform includes a range of hosted services for compute, storage and application development that run on Google hardware.</p>
High Availability Highly Available	<p>High availability (HA) is the ability of a system or system component to be continuously operational for a desirably long length of time.</p>

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Term	Context
(HA)	<p>...</p> <p>Availability experts emphasize that, for any system to be highly available, the parts of a system should be well-designed and thoroughly tested before they are used. Since a computer system or a network consists of many parts in which all parts usually need to be present in order for the whole to be operational, much planning for High Availability centers around backup and failover processing and data storage and access.</p> <p>Source: TechTarget</p> <p>At CBSA, the operational measure for High Availability is 99% 24/7 365 days a year.</p>
Hybrid Cloud	<p>Hybrid cloud is a cloud computing environment that combines on-premises and public cloud infrastructures.</p> <p>There are multiple approaches to architecting a hybrid cloud. They include:</p> <ul style="list-style-type: none"> • Hybrid cloud management software (centralized management of both on-premises and public cloud infrastructure and applications); • Vendor-native hybrid cloud – extending either the on-premises footprint to the public cloud or vice versa, and to connect public cloud resources with a data center. • Platform as a service (PaaS) – an application development platform for developers to write custom applications without provisioning the underlying infrastructure they need to run. <p>Source: Networkworld.com</p>
Implement Implementation	<p>In computer science, an implementation is a realization of a technical specification or algorithm as a program, software component, or other computer system through computer programming and deployment.</p> <p>In this context, to <i>implement</i> is the employing of techniques such as installing/injecting, configuring and/or developing the requirement and also deploying it successfully (operating without defects) into Production use.</p> <p>Source: Wikipedia</p>
"Lift-and-Shift" or Rehost/Rehosting	<p>Cloud migration approach which involves taking the entire application from its old infrastructure and moving it to the Cloud, involving no change, or with only very minor changes, or adjustment to the code.</p>

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Term	Context
	<p>Rehosting is also known as lift-and-shift: you lift the code out of an environment and shift it to another.</p> <p>Source: DZone.com</p>
<p>Next-Generation Firewall</p> <p>NextGen Firewall</p>	<p>Next-generation firewalls are a class of firewall that are implemented in either software or hardware and are capable of detecting and blocking complicated attacks by enforcing security measures at the protocol, port and application level.</p> <p>The difference between a standard firewall and next-generation firewalls is that the latter performs a more in-depth inspection and in smarter ways. Next-generation firewalls also provide additional features like active directory integration support, SSH and SSL inspection, and malware filtering based on reputation.</p> <p>Source: Techopedia</p>
OWASP Top 10	<p>The OWASP Top 10 is a powerful awareness document for web application security. It represents a broad consensus about the most critical security risks to web applications. Project members include a variety of security experts from around the world who have shared their expertise to produce this list.</p> <p>Source: OWASP</p>
Public Sector Organization	<p>For the purpose of this procurement, a public sector organization is defined as any Department, Agency or Crown Corporation of the Canadian or U.S. Federal Governments, Canadian Provincial or U.S. State Governments, Municipal governments (representing Pop. 1+ Million).</p>
Refactor/Refactoring	<p>Cloud migration approach which involves a complete re-architecting of the app to better suit the new cloud environment. This often involves modifying the app itself and a large chunk of its code to better take advantage of cloud-based features and the extra flexibility that comes with them. Refactoring is a complex and resource-intensive process which requires a lot of time to complete.</p> <p>Source: DZone.com</p>
Replatform/Re-platforming	<p>Cloud migration approach which is similar to re-hosting in that the code is not altered excessively. However, re-platforming involves some modification for the purpose of taking advantage of the new cloud infrastructure. Some modifications could include: modifying the way the app interacts with the database to benefit from automation and a more</p>

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Term	Context
	capable database infrastructure; adding new features to enable better scaling and allow the app to benefit from the reserved resources of your cloud environment; or integrating the app with native features of the Cloud while keeping code modifications at a minimum. Source: DZone.com
Reverse engineering	<p>Reverse engineering is "the process of analyzing a subject system to identify the system's components and their interrelationships, and to create representations of the system in another form or at a higher level of abstraction", where the "subject system" is the end product of software development. Reverse engineering is a process of examination only.</p> <p>There are two components in reverse engineering: re-documentation and design recovery. Re-documentation is the creation of new representation of the computer code so that it is easier to understand. Meanwhile, design recovery is the use of deduction or reasoning from general knowledge or personal experience of the product in order to fully understand the product functionality.</p> <p>Source: Wikipedia</p>

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ANNEX B
BASIS OF PAYMENT

INITIAL CONTRACT PERIOD:

Initial Contract Period (August 4, 2020 to August 3, 2023)				
Resource Category	Level of Expertise	Firm Per Diem Rate		
		Year 1	Year 2	Year 3
I.6 Network Analyst	Level 3			
I.7 Platform Analyst	Level 3			
I.9 System Administrator	Level 3			
I.10 Technical Architect	Level 3			
I.11 Technology Architect	Level 3			
B.2 Business Architect	Level 3			
A.1 Application/Software Architect	Level 3			
A.7 Programmer/Analyst	Level 3			
I.1 Data Conversion Specialist (Cloud Data Scientist)	Level 3			
I.1 Data Conversion Specialist (Cloud Data Migrations)	Level 3			
C.11 IT Security Vulnerability Analysis Specialist (Cloud)	Level 3			

OPTION PERIODS:

Option Period 1 (August 4, 2023 to August 3, 2024)				
Resource Category	Level of Expertise	Firm Per Diem Rate		
I.6 Network Analyst	Level 3			
I.7 Platform Analyst	Level 3			
I.9 System Administrator	Level 3			

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I.10 Technical Architect	Level 3		
I.11 Technology Architect	Level 3		
B.2 Business Architect	Level 3		
A.1 Application/Software Architect	Level 3		
A.7 Programmer/Analyst	Level 3		
I.1 Data Conversion Specialist (Cloud Data Scientist)	Level 3		
I.1 Data Conversion Specialist (Cloud Data Migrations)	Level 3		
C.11 IT Security Vulnerability Analysis Specialist (Cloud)	Level 3		

Option Period 2 (August 4, 2024 to August 3, 2025)		
Resource Category	Level of Expertise	Firm Per Diem Rate
I.6 Network Analyst	Level 3	
I.7 Platform Analyst	Level 3	
I.9 System Administrator	Level 3	
I.10 Technical Architect	Level 3	
I.11 Technology Architect	Level 3	
B.2 Business Architect	Level 3	
A.1 Application/Software Architect	Level 3	
A.7 Programmer/Analyst	Level 3	
I.1 Data Conversion Specialist (Cloud Data Scientist)	Level 3	
I.1 Data Conversion Specialist (Cloud Data Migrations)	Level 3	
C.11 IT Security Vulnerability Analysis Specialist (Cloud)	Level 3	

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ANNEX C
SECURITY REQUIREMENTS CHECK LIST
(Provided under separate cover)



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

TASK AUTHORIZATION FORM FORMULAIRE D'AUTORISATION DE TÂCHES

PART 1 (completed by the Technical/Project Authority) / **PARTIE 1** (complété par le Responsable technique / Chargé du projet)

A. General Information / Informations générales

Contract Number / Numéro du contrat :

Contractor Name / Nom du Contracteur :

Task Authorization (TA) No. N° de l'autorisation de tâches (AT) :	Commitment No. N° de l'engagement :	Financial Coding Code financier :	Date of Issuance Date d'émission :	Response required by Réponse requise d'ici le :

B. For Amendments Only / Aux fins de modification seulement

Amendment No. / N° de la modification :

Reason for the Amendment / Raison pour la modification :

C. TA Requirements / Exigences relatives à l'AT

Required Resource(s) / Ressource(s) requise(s)

Category and Level Catégorie et Niveau	Estimated Level of Effort (days) / Niveau d'effort estimatif (jours)	Linguistic Profile / Profile linguistique	Required Level(s) of Security / Niveau(x) de sécurité requis

Statement of Work (tasks, deliverables, reports, etc.) / Énoncé des travaux (tâches, livrables, rapports, etc.)

See attached / Voir pièce jointe

Period of Services / Période de service:

Initial Start Date / Date de début initiale :

Initial End Date / Date de fin initiale :

Extended End Date (See Reason for the Amendment) / Date de fin prolongée (voir Raison pour la modification):

☐ Option To Extend Initial End Date / Option pour prolonger la date de fin initiale

Optional End Date(s) / Date(s) de fin optionnelle(s)	Status / Statut
	<input type="radio"/> In Effect / en vigueur
Travel Requirement(s) / Exigence(s) de voyage n/a	
Work Location(s) / Lieu(x) de travail :	

PART 2 (completed by the Contractor and/or the Technical/Project Authority) / **PARTIE 2** (complété par le Contracteur et/ou le Responsable technique / Chargé du projet)

Contractor Resource(s) and Estimated Cost / Ressource(s) du Contracteur et Coût total estimatif					
Note: once approved, only the following resources may provide services under this TA. / Nota : une fois approuvée, seules les ressources suivantes peuvent fournir des services sous la présente AT					
Name / Nom Category and Level / Catégorie et Niveau	PWGSC Security File No. / N° du dossier de sécurité TPSGC	Linguistic Profile / Profil linguistique	Per Diem Rate / Taux journalier	Estimated Level of Effort (days) / Niveau d'effort estimatif (jours)	Total Estimated Cost / Coût total estimatif
0					\$0.00
0					\$0.00
Estimated Cost / Coût estimatif					\$0.00
Total Estimated Travel and Living Cost / Coût total estimatif de voyage et de vie					\$0.00
Total Estimated Cost / Coût total estimatif					\$0.00
Check applicable Basis of Payment / Cocher la Base de Paiement applicable :		Maximum Price / Prix Maximum :	<input type="checkbox"/>	Firm Price / Prix Ferme :	<input type="checkbox"/>

PART 3 - TA APPROVAL BY CANADA / PARTIE 3 - APPROBATION DE L'AT PAR LE CANADA

<p>By signing this TA, the authorized client authority and/or the PWGSC Contracting Authority certify(ies) that the content of this TA is in accordance with the conditions of the Contract.</p> <p>The client's authorization limit is \$150,000. When the value of a TA and its amendments (excluding Applicable Taxes) is in excess of this limit, the TA must be signed by the authorized client and forwarded to the PWGSC Contracting Authority for authorization.</p>	<p>En apposant sa signature sur l'AT, le client autorisé et/ou l'autorité contractante de TPSGC atteste(nt) que le contenu de cette AT est conforme aux conditions du contrat.</p> <p>La limite d'autorisation du client est 150,000 \$. Lorsque la valeur de l'AT et ses modifications (excluant les taxes applicables) dépasse cette limite, l'AT doit être signée par le client autorisé et transmise à l'autorité contractante de TPSGC pour autorisation</p>
<p>Name of Technical Authority / Nom de l'autorité techni _____ Date _____</p> <p>Signature _____</p>	<p>Name of Contracting Authority / Nom de l'autorité contractante _____ Date _____</p> <p>Signature _____</p>
<p>Name of the representative _____ Date _____</p> <p>Nom du représentant du Ministère _____</p>	
<p>Signature _____</p>	

PART 4 - CONTRACTOR SIGNATURE / PARTIE 4 - SIGNATURE DU CONTRACTEUR

Name and Title of individual authorized to sign on behalf of the Contractor / Nom et titre Signature de la personne autorisée à signer au nom de l'entrepreneur	Signature	Date

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SECURITY REQUIREMENTS CHECK LIST (SRCL)

LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE

1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine		CBSA	2. Branch or Directorate / Direction générale ou Direction		ISTB
3. a) Subcontract Number / Numéro du contrat de sous-traitance		3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant			
4. Brief Description of Work / Brève description du travail					
TBIPS Cloud B Engineering Professional Services over \$2 Million					
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?					<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?					<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
6. Indicate the type of access required / Indiquer le type d'accès requis					
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)					<input type="checkbox"/> No Non <input checked="" type="checkbox"/> Yes Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.					<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?					<input checked="" type="checkbox"/> No Non <input type="checkbox"/> Yes Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès					
Canada <input checked="" type="checkbox"/>		NATO / OTAN <input type="checkbox"/>		Foreign / Étranger <input type="checkbox"/>	
7. b) Release restrictions / Restrictions relatives à la diffusion					
No release restrictions Aucune restriction relative à la diffusion <input checked="" type="checkbox"/>		All NATO countries Tous les pays de l'OTAN <input type="checkbox"/>		No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	
Not releasable À ne pas diffuser <input type="checkbox"/>					
Restricted to: / Limité à: <input type="checkbox"/>		Restricted to: / Limité à: <input type="checkbox"/>		Restricted to: / Limité à: <input type="checkbox"/>	
Specify country(ies): / Préciser le(s) pays:		Specify country(ies): / Préciser le(s) pays:		Specify country(ies): / Préciser le(s) pays:	
7. c) Level of information / Niveau d'information					
PROTECTED A PROTÉGÉ A <input checked="" type="checkbox"/>		NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>		PROTECTED A PROTÉGÉ A <input type="checkbox"/>	
PROTECTED B PROTÉGÉ B <input checked="" type="checkbox"/>		NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>		PROTECTED B PROTÉGÉ B <input type="checkbox"/>	
PROTECTED C PROTÉGÉ C <input checked="" type="checkbox"/>		NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>		PROTECTED C PROTÉGÉ C <input type="checkbox"/>	
CONFIDENTIAL CONFIDENTIEL <input checked="" type="checkbox"/>		NATO SECRET COSMIC TOP SECRET <input type="checkbox"/>		CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	
SECRET SECRET <input checked="" type="checkbox"/>		COSMIC TRÈS SECRET <input type="checkbox"/>		SECRET SECRET <input type="checkbox"/>	
TOP SECRET TRÈS SECRET <input type="checkbox"/>				TOP SECRET TRÈS SECRET <input type="checkbox"/>	
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>				TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>	

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Canada

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PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
 Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes
 If Yes, indicate the level of sensitivity:
 Dans l'affirmative, indiquer le niveau de sensibilité:

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?
 Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? ☒ No ☐ Yes

Short Title(s) of material / Titre(s) abrégé(s) du matériel:
 Document Number / Numéro du document:

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> RELIABILITY STATUS
COTE DE FIABILITÉ | <input checked="" type="checkbox"/> CONFIDENTIAL
CONFIDENTIEL | <input checked="" type="checkbox"/> SECRET
SECRET | <input type="checkbox"/> TOP SECRET
TRÈS SECRET |
| <input type="checkbox"/> TOP SECRET - SIGINT
TRÈS SECRET - SIGINT | <input type="checkbox"/> NATO CONFIDENTIAL
NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET
NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET
COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS
ACCÈS AUX EMPLACEMENTS | | | |

Special comments:

Commentaires spéciaux:

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE: Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
 Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? ☒ No ☐ Yes
 If Yes, will unscreened personnel be escorted?
 Dans l'affirmative, le personnel en question sera-t-il escorté? ☒ No ☐ Yes

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
 Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes

11. b) Will the supplier be required to safeguard COMSEC information or assets?
 Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? ☒ No ☐ Yes

PRODUCTION

11. c) Will the supplier be required to repair and/or modification of PROTECTED and/or CLASSIFIED material or equipment?
 Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? ☒ No ☐ Yes

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
 Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
 Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? ☒ No ☐ Yes

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PART C - (continued) / PARTIE C - (suite)

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.
 Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.
 Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category Catégorie	PROTECTED PROTÉGÉ			CLASSIFIED CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL	SECRET	TOP SECRET	NATO RESTRICTED	NATO CONFIDENTIAL	NATO SECRET	COSMIC TOP SECRET	PROTECTED PROTÉGÉ			CONFIDENTIAL	SECRET	TOP SECRET
				CONFIDENTIEL		TRÉS SECRET	NATO DIFFUSION RESTREINTE	NATO CONFIDENTIEL			COSMIC TRÉS SECRET	A	B	C	CONFIDENTIEL	
Information / Assets Renseignements / Biens Production																
IT Media / Support TI																
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?
 La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE? ☒ No / Non ☐ Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".
 Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?
 La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE? ☒ No / Non ☐ Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).
 Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

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PART D - AUTHORIZATION / PARTIE D - AUTORISATION

13. Organization Project Authority / Chargé de projet de l'organisme

Name (print) - Nom (en lettres moulées) ANTONIO UTANO	Title - Titre Ex. Dir. BASD	Signature
Telephone No. - N° de téléphone 613.858.4716 / 343.291.5129	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel antonio.utano@cbse-ast.gc.ca
		Date 2019.07.15

14. Organization Security Authority / Responsable de la sécurité de l'organisme

Name (print) - Nom (en lettres moulées) Pedro Lebo	Title - Titre Sr. Sec. Advisor	Signature
Telephone No. - N° de téléphone 343-291-7749	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel Pedro.lebo@cbse.gc.ca
		Date July 16/19

15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached?
Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?

☒ No
Non ☐ Yes
Oui

16. Procurement Officer / Agent d'approvisionnement

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature Mansour, Silvana
		Digitally signed by Mansour, Silvana Date: 2020.03.13 11:11:02 -04'00'
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date

17. Contracting Security Authority / Autorité contractante en matière de sécurité

Name (print) - Nom (en lettres moulées)	Title - Titre	Signature Saumur, Jacques O
		Digitally signed by Saumur, Jacques O DN: cn=CA, o=GC, ou=PWSSC-TPSGC, cn=Saumur, Jacques O Date: 2017.02.02 13:38:31 -05'00'
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel
		Date

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Security Classification / Classification de sécurité
UNCLASSIFIED

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